

# PHILADELPHIA MEDICAL TIMES.

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## ORIGINAL LECTURES.

### CLINICAL LECTURE

#### ON A CASE OF VIOLENT UNILATERAL CHOREA PRODUCED BY AMPUTATION.

*Delivered at the University Hospital*

BY H. C. WOOD, M.D.

GENTLEMEN,—The man whom I bring before you is now 74 years old, of intemperate habits, a tailor by occupation. Some ten or twelve years since, he suffered from senile gangrene of the left foot, for which amputation was finally performed, about four inches below the knee. The resulting stump is still very well formed, and has never been painful or tender.

About five or six years after the amputation, Mr. B. first noticed movements in the stump, and some months later they commenced in the left arm. Both before and since the amputation his general health has been good. At present the leg-stump is flexed at right angles to the thigh. There is a clonic spasm of the flexors, occurring a little over a hundred times a minute, and drawing the end of the stump towards the thigh, over an arc of from two to four inches. Rarely there is a spasm of the extensors, bringing the leg beyond the right angle, but never straight. There is absolutely no tenderness over the stump, nor over the popliteal or sciatic nerves. Rarely there are choreic spasms of the glutæi and other muscles moving the thigh. In the forearm the choreic movements occur from eighty to ninety times a minute. Much of the time the flexors of the fingers are especially affected; at other times the adductors and abductors jerk the hand to and fro. The biceps and muscles of the upper arm are every now and then affected, throwing the hand violently about; at times these movements are rapidly repeated. The muscles of the shoulder are rarely affected. The patient states, however, that rarely these shoulder-movements are quite active; he also states that on some days the lateral muscles of the trunk are affected: in the wards they have been quiet. The muscles of the left side of the face occasionally suffer from decided

clonic spasms: at present, as you see, there are only some tremulous movements of the upper lip and the angle of the mouth, which is slightly drawn upward, as though from habitual spasm. There are very slight choreic twitchings of the neck-muscles. The right side of the body is and always has been entirely free from abnormal movements. The man habitually sleeps with his arm elevated and placed under his head. Even in waking, when the arm is held, movements cease in it. The position assumed in sleep is evidently for the purpose of holding his arm. When his arm is confined, the movements in the stump become worse, and when the stump is restrained, it remains quiet and the movements of the arm become worse; when both are held, the movements of the thigh-muscles become very strong. The faradaic current, of considerable intensity, applied over motor points of the thigh and popliteal nerve, fails to develop any tenderness or to exert any influence upon the spasm. During sleep, the arm is often quiet, even when not restrained, but the stump is always twitching, although its movements are stated by the night nurse to be very slight during sound sleep.

It is very evident that the man before us is suffering from one of the forms of the so-called chorea of the stump. Judging from the exceeding scantiness of the literature of the subject, the affection must be a very rare one, although painful or neuralgic stumps are but too common. In some cases the parts of limbs left after amputation are affected by peculiar local painful spasms of one or more muscles, and not infrequently these cramp-like contractions coexist with neuralgia of the stump. In the majority, if not all, of such cases, the difficulty is a local disease of the nerve-fibres, and often there are distinct bulbous, neuromatous enlargements at the ends of the severed nerves. Very generally, under these circumstances, distinct tenderness exists in the end of the stump, and often it can be traced along the course of the nerves.

The relationship, on the one hand, between obstinate painful spasms occurring in a limb near where it has been divided and neuralgias of the stumps, and, on the other hand, between such neuralgias and neuritis, is so close that it seems a fair conclusion that these cramp-like spasms

are themselves produced by the local structural changes in the nerves. In most such cases the proper treatment is removal of the affected nerve, and relief is to be expected if the operation be practised sufficiently early. If the surgeon delay long, there is increased probability that the neuritis will have travelled up beyond the reach of his knife. In some cases relief is afforded at first by the operation, but after a time the pain returns. This is not remarkable: a redivided nerve, even if healthy structure be reached, may well take on afresh the old morbid action.

It is by no means clear that the bond of common etiology and pathology between local cramp spasms in a stump and a true painless chorea like the present is a very close one. The complete absence of pain or tenderness throughout his history separates the man before you widely from the patient in whose life-chart every northeast storm is marked by a day of intense suffering.

I do not think, therefore, that any conclusion as to the nature of the lesion which produces a chorea like the one in the man before you can be properly drawn from our knowledge of neuralgic stumps. It is, however, vitally important to determine whether the lesion in a case like the present is peripheral or centric. It is plain that the centres must be involved directly or indirectly, organically or functionally. There are only two ways of accounting for the symptoms. It may be that there is a peripheral lesion which acts as a permanent irritation and maintains such a permanent influence upon the nerve-centres as continually to provoke discharges of motor nervous energy.

That the correctness of such an explanation is possible is shown by the history of cicatricial epilepsy. I have seen a bodily state, in which six to twenty convulsions occurred daily, removed almost at once by the cutting out of a seemingly unimportant and certainly insensitive cicatrix.

What is possible may not exist, and the inquiry as to whether in any way an amputation may cause centric nervous disease is very pertinent. Some years since, Vulpian and Dickinson proved that after amputation a creeping structural change occurs in the nerve, which at last reaches and travels along the spinal cord. This has been confirmed by Hayem and others. The spinal lesion is on the side of the injury, and con-

sists in lessening of the gray matter of the anterior horn with atrophy of the multipolar cells, with changes in the white matter resembling those of chronic myelitis.

It is, I believe, evident that in the present case a centric spinal lesion would not be sufficient to account for the symptoms. The whole motor apparatus of one side of the body is involved, and the lesion would have to extend into the medulla. Further clinical and experimental evidence seems to prove that choreic movements are never spinal. Then, again, you will notice that there is no heightening of the reflex activity, and that the movements are distinctly not reflex: handling, tapping, tickling, the galvanic currents, all forms of peripheral irritation, alike fail to magnify them.

Any centric lesion causing the movements must be cerebral, and without doubt in the cortical substance. I believe up to the present no one has traced the structural nerve-changes following amputation beyond the cord into the brain. Pitres amputated the front leg in several kittens, and, after keeping them twenty-eight months, examined carefully their nerves, cords, and brain. He found degeneration in the cord, but the brain was perfectly normal.

It would seem to me certain that in ordinary cases the nervous lesions following amputation do not go above the spinal cord. This does not prove that the lesions never ascend higher. The present is an extraordinary case. Two or three days ago a gentleman died whom some years since I saw suffering from indubitable locomotor ataxia: a year or two later symptoms of chronic cortical cerebritis, such as is seen in general paralysis of the insane, came on, and progressed to death. This is not the first case of the kind reported, and I believe the microscope will show an ascending of the chronic inflammation from the cord to the cerebral cortex. Again, Charcot and his pupils have abundantly proven that lesions of the cortex travel downward. Whilst, therefore, we have no proof that the atrophic changes of the spinal cord following amputation ever reach the cortex cerebri, it is not at all unlikely that they sometimes do so.

When we come to set one thing against another, we can only conclude that there is at present no proof or disproof either of the peripheric or of the centric origin

of the choreic movements: either theory is commensurate with the now known facts. Dr. S. Weir Mitchell inclines to the periphtric theory, "because the fits sometimes occur too soon after amputations." It is not certain that he clearly distinguishes between painless and painful cases, and he says he never saw a case arise very soon after amputation. I can find no case like the present reported, in which the pain was developed under several months. In the man before you, five years were required. How fast a lesion might under exceptional circumstances travel we do not know. The absence of tenderness does not disprove the peripheral theory, because, as I told you, the cicatrix whose removal cured an epilepsy was entirely insensitive.

The exact etiology of the chorea remains, therefore, insolvable with our present knowledge. If the man were young and the case recent, exsection of the nerves should be practised, as giving the benefit of the doubt; but this patient is seventy-four years old, injured by intemperance, with a past history of senile gangrene and, consequently, of probably impaired arteries. The movements have gone on for years, until they have become the habit of the system. He refuses to be operated on, and I certainly would not advise operation. Medicinal treatment does not afford much hope. Atropia has been tried somewhat, with no distinct result; but it shall be further pushed. It must, of course, be injected into the muscles directly.

## ORIGINAL COMMUNICATIONS.

### THE TREATMENT OF POST-NASAL CATARRH.

*Read before the Philadelphia County Medical Society,  
September 24, 1879,*

BY WM. R. D. BLACKWOOD, M.D.

UNDER the title of our subject this evening may properly be included the treatment of an extensive series of disorders of the naso-pharyngeal space, evidencing all grades of severity, from the simplest chronic coryza, of little account, to the formidable ozena, which, in its destructive ravages, sometimes threatens, and occasionally destroys, life itself.

The great majority of cases of catarrh are not under medical treatment of any

kind, and the majority of the remainder are in the hands of advertising philanthropists, retired clergymen, Indian, botanic, eclectic, homœopathic, and such like illiterate quacks. Thousands of cases have been treated by eminent and by skilful men, without either cure or appreciable relief. Sweeping as this assertion may seem, let gentlemen only interrogate families under their charge, many of whose members suffer from catarrh without applying for advice, and they will readily discover its truth. The natural outcome is that post-nasal catarrh is considered an incurable disease, and, as the laity is not to blame for its mistaken opinion, would it not be well that an effort be made to undo this error by paying the subject more attention than it apparently receives, and which, from its importance, it undoubtedly deserves? It is singular that so much study has been given to some diseases and so little to others, and, as it does not always follow that the gravity of an affection determines the interest felt in its investigation or treatment, it is possible that in this way the subject under consideration may have been unworthily neglected.

Very little inquiry will elicit the reason why so little is successfully done in the treatment of catarrh. Briefly stated, the failure consists in relying upon general constitutional treatment, which is all well enough as an auxiliary, but not sufficient in itself. To cure the sufferer demands the persistent, skilful, personal attention of his medical adviser, and unless this course is strictly and conscientiously followed the patient will receive little benefit and his physician only discredit.

The disagreeable nature of the service, the time and trouble involved, and the difficulty in some cases of mechanical treatment, have deterred the larger part of the profession from devoting the requisite personal attention to their patients, and the expense attendant upon a necessarily extended course in the hands of most specialists has prevented many from receiving the benefits which would accrue from their services.

I do not intend speaking of the pathology of naso-pharyngeal catarrh, there being too much room for difference of theory, and too little time for discussion. The vital point is the treatment of our patient. What is to be done? No claim of novelty is intended in this paper, but it may

be that suggestions thrown out as the result of successful management might be elaborated by others, and serve a useful end to those who have hitherto given the question less attention than it of right deserves.

First, then, as to mechanical treatment,—an essential in all cases. The instruments requisite are few and simple in construction and application. At their head stands the nasal douche, an invaluable and indispensable assistant, not to be replaced by any other. The objections to its use are avoidable by simple precautions. Employ water always at a temperature of 100° F.; add one drachm of common table salt to each pint of water used; do not permit the patient to swallow during the flow of the douche; hold the reservoir no higher than the eye of the sufferer; incline the head slightly forward over a basin; use a simple douche, free from valves or complicated mechanism; an ordinary tin or glass funnel, with a yard of quarter-inch rubber tubing and a conical glass, wood, or porcelain nozzle, is as good as any, is cheap, durable, and easily made. Do not trust the douche in the hands of the patient until its use is thoroughly understood and accurately managed. In stupid, perverse, or nervous persons, never trust it to them; always apply it yourself. I have never had any trouble occur through the use of the douche. The posterior-nares syringe is a valuable adjunct, as also is the atomizer, in getting at the vault of the pharynx, which they do in many cases much more effectually than does the anterior douche. Although, theoretically, the steam atomizer appears preferable, because of the temperature being readily maintained, yet the difficulty of directing the spray in other than a horizontal line, and the view of the parts being intercepted by the boiler, render the hand-ball apparatus more convenient, especially in conjunction with simple adjustable tubes, which afford a lateral or vertical discharge at pleasure. A convenient though expensive apparatus is the compressed-air mechanism of Codman & Shurtleff, by means of which a steady flow may be maintained for any desired length of time. In common with those applied by the douche, all atomized solutions should be at blood heat and of sufficient density. Caustic- and sponge-holders, brushes of various sizes, an insufflator, a tenaculum for the uvula, a tongue-depressor, an anterior-

nares speculum, and a rhinoscopic mirror are requisite, with a strong light, natural or artificial, in the management of which nine-tenths of the imposing array of mechanism usually encountered may be dispensed with. Each patient should have his own douche, and all instruments employed in office practice must be kept thoroughly clean. Scrupulous care is to be observed in syphilitic cases that the ordinary catarrh of one patient is not complicated by specific inoculation from another.

In the department of materia medica the list of necessary agents will vary with the taste of the physician, some drugs developing powers in the disease under consideration, as in others, according to the ability shown in their use or the idiosyncrasy of each particular case. In my practice the list is not extensive. The first point in treatment is the thorough cleansing of the parts at least twice daily, the ordinary solution of sodium chloride being a satisfactory one. Occasional alternations with a solution of potassium bichromate, which I prefer to the sodium bichromate, in similar proportion, will prove effectual where the secretion is free and the posterior nares blocked. The addition of from three to five grains of potassium permanganate in solution, when the wash is from one-half to three-quarters expended, will modify the fetor and render the subsequent steps much more comfortable to the medical attendant. The liquor sodæ chlorinatæ replaces the permanganate satisfactorily, especially in delicate blondes. Potassic chlorate may also be added, but it is serviceable only from its local effect, no constitutional impression being apparent through it in my hands. The use of from one-half to one ounce of the distilled extract of witch-hazel, as prepared by Mr. McKelway, of this city, is frequently efficacious, but the ordinary fluid extract made by displacement is not reliable. The simple or compound tincture of benzoin is an admirable remedy, both locally and internally. The quantity of water necessary is determined by the amount of offensive secretion, and varies from one pint to many, the prime object being the removal of all crusts, pus, mucus, or blood, without which subsequent medication must fail from the remedy not reaching the congested or abraded tissue. In mild or recent cases the careful cleansing, as de-



scribed, of the parts will sometimes, if prolonged, effect a cure; but such success is uncommon in this intractable disease.

In long-standing and stubborn cases, after preparing the parts as suggested, a number of astringent or alterative remedies can be selected. That chosen may be employed either in solution, or, as is sometimes more efficacious, in dry powder projected on the parts by an insufflator. Snuffing the powder from the hand does not act so accurately, in consequence of much of the medicament being either detained anteriorly by the turbinated bones, or, having passed them, being drawn into the lower pharynx. Alum, bismuth, cubebs, tannic or gallic acid, with, if thought proper, ferric, cupric, or zincic sulphate, will act admirably in many cases. Granulations or adenoid tissue, if excessive, may be removed, when accessible, by the curette or galvano-cautery. I have not observed distinct patches of ulceration as often as the literature of the subject would imply their existence, except in caries or necrosis of the bones of the nasal passages (or flues, as a locomotive-building patient of mine aptly interprets them), any apparent abrasion being generally diffused; but should examination detect areas thus affected they should be stimulated or cauterized, as required, by strong solutions or the solid silver nitrate. Glacial acetic acid is a favorite with me in such instances, and tincture of iodine frequently acts admirably. Loose portions of bone or easily-detached pieces should be carefully removed, and a very small spicula will, if overlooked, be often productive of continuous discharge. I have not performed Rouge's operation in any case of catarrh, but some time ago, in assisting a friend in an operation on the upper maxillary, the feasibility of reaching the nares by that method was very apparent, and in a second operation on the same patient by myself I removed another part of the superior maxillary and a portion of the vomer, without dividing the upper lip or cheek, as had been done in the previous operation. The rapidity of union without any suppuration was remarkable, and the freedom from scar or deformity by this method is invaluable.

Attention to the general health is of moment. The secretions of the alimentary canal, the kidneys, and the skin should be inquired into, and placed in proper condition if defective. I have found the Turk-

ish bath a most efficient auxiliary in all stubborn cases. The constitutional remedies employed will vary as indicated by apparent dyscrasia. Mercuric bichloride is notably a tonic and alterative in many cases, even where syphilitic complication is not evident. I usually combine the alterative selected with compound fluid extract of *stillingia*, in drachm doses, three or four times daily. When well borne, *copaiba*, long continued, is of great service. Ferric iodide, with or without potassium iodide, and sometimes calcium chloride, are excellent in chronic scrofulous cases. Iodoform has not been of much use in my hands, either locally or constitutionally, nor has carbolic acid. As to salicylic acid or its salts I cannot yet form an opinion of their merit, although as a detergent the sodium salicylate is apparently good.

Of all therapeutic remedies I value none more highly than electricity, which convinced me of its value through the importunities of a patient whom I was treating at the time for myalgia, and who suffered badly from post-nasal catarrh. He insisted that electricity would cure his catarrh; and so it did, contrary to my opinion. It cannot, of course, be relied on in every case, but it is a valuable adjunct. Either the galvanic or the faradic current may be necessary,—sometimes both,—but the induced current appears to be the most generally applicable, and it is much the more easily managed of the two, besides being less liable to produce giddiness in those highly susceptible. Care must be exercised in galvanization, from the proximity of the basilar brain. Extremely interesting illustrations might be given in this connection did not brevity forbid.

Diet is all-important. It should be nutritious, but all veal and pork compounds must be tabooed, with all indigestible substances. Tobacco is undoubtedly highly injurious. The so-called grape-cure acts a good part, especially in those who can afford the expense of living at the vineyards.

Much more might be said and many particulars present their claims upon our attention, but your patience has been taxed already. Disagreeable as such patients are to handle, it is our duty to exert our utmost ability in their behalf, not only for their personal welfare, but for the comfort of their families and society

at large. Other formidable maladies have succumbed to medical skill, and why not that under consideration? It lies within the power of gentlemen such as compose our Society to do much in this direction, and assuredly the need is urgent.

Although I purposely refrained from touching the causation or pathology of post-nasal catarrh, one point which has interested me may be alluded to in closing, which is the belief in my own mind, from close observation, that under certain conditions the disease is contagious, even when positively non-syphilitic. I have repeatedly seen it occur in newly-married persons, and where, at school, children previously entirely healthy became affected when sleeping together. In all such instances noted no hereditary tendency existed, nor were other members of the family thus diseased. I have not heard this idea expressed by others, and many whom I have consulted dissent from it, yet through indubitable evidence I do not hesitate to assert my opinion, for if it is correct we should be on our guard, and in those thus exposed remember that "prevention is better than cure."

246 NORTH TWENTIETH STREET, PHILADELPHIA.

### SYPHILOMATA OF THE CERVICAL DURA MATER.

Read before the Philadelphia Pathological Society, September 11, 1879.

BY CHARLES K. MILLS, M.D.,

Neurologist to the Philadelphia Hospital.

**S**YPHILITIC tumors of the spinal dura mater, and, indeed, spinal tumors of any kind, are sufficiently rare to give special interest to the specimens which I have the opportunity of presenting this evening. According to Rosenthal (*Clinical Treatise on Diseases of the Nervous System*, translated by L. Putzel, 1879, p. 238), an observation by him, in 1855, may be regarded as the first published example of a syphiloma of the spinal meninges, although other cases have since been reported by Potain, MacDowel, Wilks, E. Wagner, and others.

*Case I.*—W. H., aged 24, colored, married, for several years had been addicted to excessive venery, and twelve months before coming under observation had contracted a hard chancre. Two months after this he began to suffer with severe pain in the back of his neck, which soon became stiff and slightly

twisted. These symptoms of irritation grew worse, and soon were added weakness, first of the arms, and later of the legs, with numbness and unpleasant sensations in the limbs. In six months he was bedridden.

On admission to the hospital, two months before his death, he was in a state of pitiful helplessness, bound hand and foot by disease. He was only able to sit up for a short time when fully supported. His neck was very rigid, and seemed to be shortened and sunken together. His head was held slightly bowed forward and twisted towards the right, any movement of it causing him great pain. He often felt as if he was being choked. He complained of dimness of vision. Both arms were much wasted, the legs, however, showing but little atrophy. He could not lift either hand from the bed, and could only bend the lower limbs slightly at the knees. The left side was possibly a little bit less helpless than the right. Electro-contractility was preserved. Sensation was diminished in both upper and both lower extremities, but was not mapped out. The slightest irritation of the skin would cause his legs to jerk violently. The thighs, apparently spontaneously, would sometimes assume a semi-flexed position to the pelvis, from which he had no power to release them; they would have to be straightened by the attendants. His evacuations were involuntary, and incomplete priapism sometimes occurred. His sufferings could only be palliated. He continued to grow worse. Every night, and often during the day, he was attacked with severe pains in his knees and ankles. No acute bed-sores made their appearance, but several small ones, from pressure, formed at different points. On a number of occasions he had most distressing paroxysms. He would all at once be seized with a sense of choking and terrible dyspnoea, and would have to be propped and held up in bed; at the same time, profuse perspiration would break out. He finally died in one of these attacks.

The following was his temperature record for the two weeks preceding his death, the observations being made in the right axilla every morning and evening, the first temperature after the date being in each case for the morning:

October 7, 97.6° F.; 97.4° F. Oct. 8, 98°; 99.6°. Oct. 9, 98°; 99°. Oct. 10, 97.9°; 98.5°. Oct. 11, 97°; 97°. Oct. 12, 97.7°; 97°. Oct. 13, 98°; 97°. Oct. 14, 100.5°; 100°. Oct. 15, 97°; 97°. Oct. 16, 97.5°; 98°. Oct. 17, 97.6°; 101°. Oct. 18, 97.4°; 98°. Oct. 19, 97°; 98.8°. Oct. 20, 99.4°. The average temperatures for the two weeks were: morning, 97.9°; evening, 98.3°.

Antisyphilitic remedies, rest, leeches, anodynes, and respiratory and cardiac stimulants were among the measures employed in the treatment of the case.

A post-mortem examination of the brain

and spinal cord was made. The floor of the fourth ventricle, the corpus quadrigeminum, and the choroid plexuses were apparently congested, being redder than usual; otherwise, the membranes and substance of the brain presented nothing abnormal.

On cutting through the vertebral column, a quantity of pus, and of pus mixed with blood, escaped from the spinal canal, particularly from the right side at the level of the third and fourth cervical vertebrae. The inner faces of the anterior segments of the second, third, and fourth cervical vertebrae were eroded and partly carious, the intervertebral cartilages being also partly destroyed by disease.

On the external surface of the dura mater, for a distance of two and a half inches in the upper and middle cervical region, was an exudation or growth, with an uneven, irregular surface, from one-fourth to one-third of an inch in greatest thickness: it was distributed so as to girdle the cord, but was most developed in front. The inner surface of the membrane was smooth, and the cord within the limits of the diseased dura was flattened. The cervical nerves passing through the membranes were compressed and atrophied.

Nearly in the centre of the anterior aspect of the cord, about the level of the third cervical vertebra, was an oval or bean-shaped spot of bulging, half an inch long and one-eighth of an inch wide. It seemed to be defined from the surrounding tissue, looking like a small intra-medullary tumor. The cord above and below it was softer than elsewhere. Three inches above the cauda equina was an exactly similar, but smaller, eminence.

Sections were made at intervals in the cord, and it, with the membranes and diseased mass, was examined microscopically by Dr. H. F. Formad, to whom I am indebted for the following report:

"The thickening situated on the cervical portion of the dura mater was shown by the microscope to be an organized new growth, made up of embryonic connective-tissue cells, those of round shape predominating, and containing also giant cells and blood-vessels with distinct walls. This structure, and the situation of the growth, in the presence of a specific history, indicate it to be a syphiloma (gumma). The adventitia of the blood-vessels of the dura mater was very much thickened, and in some places the walls of the vessels had a glistening, homogeneous aspect, resembling that of amyloid degeneration.

"Transverse sections of the cervical portion of the spinal cord showed a total transverse sclerosis, the neuroglia being greatly increased, and the medullary sheath of the nerve-tubules nearly completely atrophied. The blood-vessels, which all had thickened walls, appeared to have undergone in many places amyloid degeneration, and in their course were seen numerous military hemorrhagic infarctions.

Some of the latter were converted into minute abscesses, containing, besides pus, also compound granular cells and corpora amylacea. They sometimes reached the size of  $\frac{1}{100}$  of an inch. The gray matter of the horns was comparatively less affected; some of the ganglionic cells were partly atrophied, while others appeared hypertrophied.

"The central spinal canal was seen to be filled with lymphoid cells imbedded in a reticulum of delicate fibres. I have met with such obliteration of this canal by cells several times, and it is probably of not rare occurrence in sclerosis; it is, however, described only once by Frommaun (*Untersuch. über die norm. u. pathol. Anat. des Rückenmarks*, June, 1867).

"In sections made from the dorsal portion of the cord the sclerosis was only in the lateral and posterior columns; in the lumbar region, in the posterior only.

"The bean shaped eminences, or areas of bulging, situated anteriorly in the cervical and lumbar cord, did not differ essentially in histological character from the structure of the cord itself in these locations, being composed entirely of connective-tissue elements."

*Case II.*—H. J., aged 31, colored, married, was admitted to the Philadelphia Hospital August 26, 1879. The history obtained from herself and friends was that in the preceding May she had been taken with a feeling of stiffness and pain in the neck. The pain radiated upwards to the head, and, to a less extent, down her back and arms; it was greatly aggravated by any kind of jarring or jolting; she suffered so much in this way that she soon became unable to ride in the cars. She lost flesh and became weak, but did not become distinctly paralyzed until two weeks before she was brought to the hospital. At this time, while attempting to dress herself, both arms suddenly fell powerless into her lap. The next day she could not stand, and since she had been completely helpless from the neck downwards.

On examining her, I found that she was compelled to lie constantly in one position on her back. She could not sit up at all, even with the amplest support. Her head and neck were held perfectly rigid, the face looking a little to the right, so that she rested on the right posterior portion of the head. Any attempt to change this position caused extreme pain, which shot upwards to the head. Both arms were entirely helpless. She was able to pull up the right leg so as slightly to flex it at the knee, but she could not do this with the left. She could perform movements with her feet, but with diminished facility. Roughly tested with the æsthesiometer, sensation seemed to be pretty good, but her answers in regard to the distance apart of the compass-points were uncertain and confusing. Reflex twitchings of the legs were produced when the points were brought in contact with the skin. The patella reflexes were present

on both sides, but not exaggerated; the response on the right was poorer than on the left, the latter being about what is usually found in health. When first examined, on the day of admission, she had full control of her bladder and bowels. She had been troubled more or less for several weeks with shortness of breath, and three days before coming under observation she had had a severe paroxysm of respiratory difficulty, in which she thought she was "dying away." The attack was accompanied by profuse perspiration. Her pulse, recorded on the 26th, was 84, weak, but not intermittent.

Treatment was instituted, but without much hope, as the patient was, when admitted, evidently in the last stages of slow compression of the cervical cord. Her bed and pillows were so arranged as to give her head and body as complete rest as possible, and among the other measures adopted were leeches to the nape of the neck, potassium bromide and iodide in combination internally, hypodermic injections for the relief of pain, an ointment of belladonna, iodine, and mercury locally, and belladonna, digitalis, and ammonia for the paroxysms of dyspnoea and exhaustion. Fluid and semi-solid food was also frequently given. She grew worse from day to day; she was often bathed in profuse perspiration; dyspnoea and cardiac irregularity and weakness became greater, and she died, exhausted, August 31, five days after admission. Her temperatures, taken on the evening before her death, and on the day of her death, were as follows:

	Right axilla.	Left axilla.
August 30,	100° F.	102.2° F.
31,	99.4° "	99° "

A post-mortem examination was made twenty three hours after death. Post-mortem rigidity had not taken place to any marked extent, except in the fingers. No decided wasting of the body or limbs was present. The muscles of the neck were completely relaxed.

I carefully dissected away the extravertebral tissue,—muscle, fat, etc.,—to ascertain whether any disease outside of the vertebral column existed; but no evidence of such could be found,—no exudation, suppuration, or signs of inflammatory action. The spinal cord and membranes were examined in position after sawing through and removing the posterior portion of the vertebral column. On the left side of the cord, outside of the dura mater, a layer of dark, clotted blood could be seen, reaching upwards from the fifth cervical vertebra nearly to the upper limit of the cord. Externally, the upper portion of the dura for a distance of more than two inches was the seat of an irregularly-flattened exudation or growth, which was found on removal of the cord and membranes to be thickest to the left, in front and above. In the upper part of this diseased mass, at about the level of the second cervical vertebra, was a small dark

clot about the size of a half-dime. The inner surface of the dura was smooth, but more opaque than usual. After removing the cord and membranes the cervical and dorsal vertebrae were examined minutely, but nothing abnormal was found except a very slight roughening of the adjacent borders of the inner surfaces of the anterior segments of the second and third vertebral bones.

The upper cut end of the cord was softened and yellowish-white in color. The cord in the upper cervical region was more flattened than usual anteriorly.

The brain and its membranes were examined. The pia mater showed signs of recent hyperæmia, particularly about the junction of the ascending parietal convolution with the inferior parietal lobule. No other organs were examined.

A microscopical examination of the thickening of the external dura mater, made by Dr. H. F. Formad, showed it also to be a syphiloma, similar in structure to the specimen from the first case. Sections from the cord below showed likewise a transverse sclerosis.

*Remarks.*—Case I. is an example of an interesting compound condition: caries, probably syphilitic, of the vertebrae; syphiloma of the external dura mater; compression of the cord at the level of the tumor; sclerosis of the cord below the growth, at two points so marked as to appear almost like intra-medullary gliomata. In Case II. we have a syphiloma of the external dura mater, with compression of the cord and transverse sclerosis; and, in addition, dural hemorrhage, probably intercurrent with the growth. Disease of the bone was not present in this case. In regard to the first case, we have good authority for the view that syphilis may cause vertebral caries. The sclerosis of the cord below the tumor was doubtless of the nature of secondary degeneration.

During life I supposed that the first case might be one of external spinal pachymeningitis, or spinal peri-pachymeningitis, consecutive to, or in connection with, caries of the vertebrae. Such cases have been described by E. Wagner, Michaud, and others. They sometimes follow traumatism. Sometimes inflammations extend from the exterior through the intervertebral foramina.

Caries of the upper cervical vertebrae, as the specimens show, was, indeed, present. The probabilities are, however, as we have here an undoubted syphilitic thickening or gummy growth on the external layer of the dura mater, that the vertebral disease was also syphilitic.



In regard to etiology and symptomatology, my remarks upon these cases will be brief. In the first case, the patient had a clear history of chancre; in the second, although no history of syphilis was obtained, the antecedents and surroundings of the patient were such as to make it probable that she had been infected. Both cases were striking illustrations of cervical paraplegia from compression-myelitis. This condition may arise in various ways, among which it is necessary to distinguish, if we would treat cases satisfactorily. It may be due to disease or injury of the vertebral column; to peri-meningeal, meningeal, or spinal growths; to wounds of the cord; to hemorrhage; to internal spinal pachy-meningitis; to disease affecting bilaterally the peripheral nerves; and to other causes.

In both cases the arms suffered first and most severely; in both sensation was impaired, but not to the same extent as motion. In the first case the tendinous reflexions were not examined, but skin reflexes were increased; in the second, the patellar reflex on one side was probably diminished, the other being about normal. The diminution in this case may have been due to the destruction by descending degeneration of the gray matter of the cord below the seat of the lesion. The tendency to priapism present in the man is of interest in reference to the question of the existence and position of a centre of erection in the cord. Several cases have been reported in which disease or injury of the cervical or upper dorsal region has given rise to priapism, it is supposed by some, from irritation of a spinal centre of erection. The respiratory paroxysms were among the most distressing manifestations. Cases of both cervical and dorsal disease often suffer from respiratory disturbances, and not infrequently, as in those now reported, die during such attacks, apparently from respiratory and cardiac paralysis. Occasionally, as in a case recently observed by me but not yet reported, asphyxia is produced by spasm of the muscles concerned in respiration. Usually profuse perspiration accompanies these seizures, probably showing implication of vaso-motor as well as respiratory nerve-paths and centres. The results of the temperature observations in the first case, although not remarkable, are worth recording. The temperatures generally and

the average temperatures were below the normal. Wonderful oscillations of temperature have occurred as the result of spinal lesions, and particularly those of the cervical spine.

#### AN EXPERIMENT IN DISINFECTION OF A SAILING-VESSEL BY STEAM.

BY RICHARD A. CLEEMANN, M.D.,

Member of the Board of Health of Philadelphia.

IN the last number of *The Sanitarian* the editor, Dr. Bell, gives an abstract of some papers published by him bearing upon the subject of disinfection by heat, and at the conference of the National Board of Health with sanitarians from various parts of the country, held in Atlanta, Georgia, last May, he spoke, going over much of the same ground, very decidedly in favor of the disinfection of vessels by steam. Many advantages of such a scheme at once suggest themselves: among others, the materials to be employed, fuel and water, are constantly at hand; the steam is harmless to many things carried in ships, and it cools rapidly when the disinfection is discontinued, so that the vessel becomes almost immediately again habitable.

Dr. Bell maintains that the plan is entirely practicable, basing his opinion upon the experience of four vessels in which it was tried (the sailing-vessels "Vixen" and "Mahories," and the steamers "Delaware" and "Don"), and upon the results of some interesting experiments made to determine the degree of heat that could be attained by introducing steam into closed chambers.

This testimony, however, is not entirely unassailable.

All the vessels had had yellow fever on board, were filled with steam, and thereafter were free from the disease; but the "Vixen" was not treated in this manner until after the season had passed during which yellow fever ceased to prevail; and it was also thoroughly cleaned and painted: so that, as far as this vessel is concerned, the argument is open to the objection that the fever may have died out spontaneously or else was exorcised by the scrubbing and painting without the aid of the steam. The cases of the other vessels are stronger; but three is a small number to lead to a positive conclusion.

A degree of temperature sufficiently high to destroy the supposed germs of yellow fever was undoubtedly reached in the rooms which he packed with steam, but these chambers, surrounded as they were by air, were in a measurably different condition from the interior of vessels, the sides and bottoms of which are floating in so excellent a heat-conducting medium as water. To obtain additional data on the subject, I proceeded as follows, being kindly assisted by the port physician, Dr. Leidy. Steam was introduced from the boiler of a tug-boat into the hold of a vessel, on the sloping floor of which a self-registering thermometer had been laid. The vessel was the "Clara E. McGilvery," a ship of four hundred and three tons register, which arrived at Philadelphia 30th of September. The steward had died during the voyage from the West Indies of an unrecognized fever, and one of the crew, who was taken sick after his arrival in this port, died of yellow fever at the Municipal Hospital. The cargo of sugar had been removed from the vessel, and she lay at anchor in the open stream. The tug—the one used for the visits of the port physician—has an engine of fifty-horse-power; it was fastened close alongside the ship; the pipe leading from the boiler to the safety-valve had been tapped near its base, and an arrangement made by which a rubber hose was attached to it; this hose, two inches in diameter, passed up over the side of the vessel and was let down into the hold through an opening bored in the main hatch; it was long enough to reach nearly to the keelson, and was fastened at its end to an upright post to prevent it from swinging about under the impulse caused by the escape of the steam. The self-registering thermometer, the scale of which began at 100° Fahr., was placed about twenty feet distant from the mouth of the hose, on the floor of the vessel, as said above. Care was taken that the hatches were well closed and covered with tarpaulin. The steam was now allowed to enter the hose, the pressure of the steam-gauge in the engine-room marking sixty-two pounds; in ten minutes the pressure had fallen to forty pounds, when the steam was shut off for an interval of seven and a half minutes, after which the pressure had risen to sixty-one pounds. Again the steam was allowed to pour into the vessel, this time for the period of an hour consecutively; after half

an hour the indicator on the steam-gauge marked thirty pounds, and at the close of the hour only nineteen pounds. A few minutes after the steam was shut off, when, the hatch being raised, the vapor was sufficiently dissipated to allow me to see, I descended into the hold; there was a little water from the condensed steam alongside the keelson, and the temperature below still uncomfortably hot; I was very much disappointed to find that the mercury in the thermometer had not reached 100° Fahr. The attempt at disinfection was a failure. Without doubt a thermometer *suspended* in the interior of the ship would have shown a very high temperature, perhaps sufficiently high to destroy any disease germs, but it is altogether probable that the poison of yellow fever floats in the bilge-water and clings to the sides and bottoms of the hold, and it is not to be expected that a heat there of less than 158° Fahr. at the very least, the point at which a concentrated solution of albumen will coagulate, would be fatal to the fever-germ.

The above experiment is recorded not in opposition to the scheme of the disinfection of vessels by steam, but as showing that the process is a serious one, and needs for its success a boiler in which a large amount of steam can be generated rapidly. It would lead me to be sceptical of the efficacy of the plan in any particular case in which it had been applied, unless the temperature of the sides or bottom of the ship had been tested with the thermometer and found sufficiently high; and it causes me to hesitate to subscribe to the opinion that "with an engine equal to those commonly in use in the tug-boats in the harbor of New York, in three hours' time a sufficient degree of steam heat can be thrown into any ship to disinfect it of yellow fever."

## NOTES OF HOSPITAL PRACTICE.

### HOSPITAL OF THE JEFFERSON MEDICAL COLLEGE.

CLINICAL SERVICE OF DR. J. C. WILSON.  
A CASE OF RECURRENT PLEURISY.

THIS patient, J. H., 23 years old, a bag-sewer, has been under our observation a long time, otherwise his present illness would not warrant more than a few words concerning the diagnosis and treat-

ment of dry or plastic pleurisy. A week ago, while working at his trade, he suddenly, on stooping, felt a sharp pain in the back, at the base of the left chest. This pain continued to annoy him on movement and on taking a deep breath. That night he had chilly sensations and fever. The next day there was slight cough, with a trifling mucous expectoration and provoking pain. He now had to give up work, and applied at the dispensary of the hospital for treatment. He had slight fever, and, on auscultation, coarse friction-sounds were heard, not at the base but across the middle of the left chest, in front and behind. He was directed to apply a blister, and to take Dover's powder with nitre, along with full doses of quinine. This was four days ago. To-day he is much better. There is scarcely any pain, even on taking deep inspirations. He does not cough, and he is quite free from fever. There is, however, no appetite, and he says he is weak. Observe his tongue. It is thickly covered with a foul, yellowish-brown fur. We are, then, studying together a case of dry pleurisy, now fully convalescent, after a few days' treatment.

But let us strip our patient's chest, and examine it closely.

To the most unpractised eye the difference in the two sides of the thorax is apparent. The left shoulder is lower than the right; the left side is smaller, and fails to expand as freely as the right on inspiration. It is flatter, and this flatness is most obvious below the nipple and to the left of it. Moreover, you perceive that the visible impulse of the heart is displaced. It is seen a little to the left (outside) of the nipple-line, and, upon inspecting the spine, it is seen that there is a lateral curvature in the upper dorsal region, the concavity of which looks towards the left. We percuss the chest, and find the right side fully resonant, the left slightly dull, or, at all events, much less relatively resonant, save above the fourth rib; and, on auscultation, we hear an occasional coarse friction-sound, and everywhere a feeble respiratory murmur, notably feeble in comparison with that of the right side.

Surely, you ask, all this is not the result of his present attack? Certainly it is not; and herein lies the clinical interest of the case.

More than four years ago, this man, then a telegraph messenger, had an attack of sickness in many respects resembling this one (he had, in fact, a pleurisy); but, instead of an exudation of plastic lymph, there was an effusion of serum. This fluid remained in his chest more than two years, during which time, he tells us, he was very wretched, and quite unable to work for his living. At the end of that time he came under our care, and I drew off, by aspiration, more than five pints of slightly-turbid serum. This operation was performed before the class, and the patient walked to his home. He rapidly improved in every respect, and thought himself well for a time; but eight months later the effusion reaccumulated and was again removed. Since then his health has been good.

The alterations in the chest—deformities we will call them—are the result of his old trouble. Upon the removal of fluid from the pleural sac, the space it occupied is obliterated by an approach of the opposite walls of the cavity that contained it towards each other; the diaphragm rises, to some extent; the lung expands, but not to its normal fulness; and the chest-wall falls in. The costal and pulmonary pleuræ, coming in contact, unite, and the lymph which covers their surfaces becomes connective tissue, which contracts, displacing the heart to the left, flattening the chest, and even bending the spinal column, as you see, towards the affected side. You will be often able to diagnosticate a long-healed pleural effusion by an inspection of the chest.

At the time of his first attack this man was in poor health; the product of the inflammation was fluid serum. He has been strong and well till the present attack; the product is now plastic,—it is lymph. The friction-sounds are high up in the chest, for the reason that the pleural surfaces below their seat are adherent. There is but little room for effusion in this sac, diminished as it is by such adhesions.

The nature of the product of inflammation in pleurisy is determined, in great part, by the general health of the patient. If he be in robust health, and his blood well elaborated, it will consist of plastic lymph; if he be feeble or anæmic, a serous outpour will take place; whilst in conditions of cachexia, or if the scrofulous or tubercular diathesis be present, we may

have an effusion purulent from the outset,—an empyema.

The local pleurises of phthisis are not primary; they are secondary to processes in the lung, and they are plastic, resulting in adhesions which are often very thick. On the other hand, the pleural *effusions* that I have met with in individuals suffering from phthisis have all been purulent.

### TRANSLATIONS.

THE ETIOLOGY OF PUERPERAL VESICAL CATARRH.—Schwartz (Inaug. Diss., Halle, *Cbl. f. Chir.*, No. 39, 1879) considers catarrh of the bladder occurring in puerperal women due to infection. Neither injuries during labor, nor repeated introduction of the catheter giving rise to mechanical irritation, can be regarded as exciting causes. Nor can retention of urine, for decomposition of the urine does not result from this. According to Schwartz, the causes of puerperal catarrh of the bladder are (1) the introduction of fermentative material by means of the catheter, and (2) the spontaneous extension of inflammatory processes from the neighboring parts to the vesical mucous membrane. In 32 cases coming under his notice at Halle, the most part occurred from the first of these causes, only two being traceable to extension of inflammatory action from neighboring parts, and nine being of uncertain origin. Catarrh of the bladder, therefore, is not particularly liable to affect puerperal women who have had a hard labor, but those who have been catheterized.

Antiseptic precautions, especially preventing the entrance of air, by filling the catheter with carbolic acid solution before its introduction, protect the patient effectually. Since 1875, when these precautions were adopted in the Halle lying-in clinic, puerperal vesical catarrh is one of the rarest accidents.

CALCULUS OF WHARTON'S DUCT—INFLUENCE OF THE RHEUMATIC DIATHESIS—SALIVARY COLIC AT THE MENSTRUAL EPOCH—EXTRACTION OF THE CALCULUS—CONTINUATION OF THE SYMPTOMS.—Chevallereau (*La France Méd.*, No. 76; from *Cbl. f. Méd.*, No. 39, 1879) gives the case of a woman, 44 years of age, of rheumatic antecedents, who had noticed during several years previously, for five or six days before

the menstrual period, a sudden pain in the left side of the mouth, which disappeared when the menses began to flow. At the beginning of the climacteric year, menstruation appearing three times within a single month, she sought medical aid. The pain had lasted eight days; the tissues at the floor of the mouth were much swollen, the patient being able to eat but little. In addition, the mucous membrane of the mouth was tumefied; the duct of Wharton was patulous, and gave exit to a mucopurulent secretion. Examination with the sound showed a stone four centimetres within the opening of the duct. An incision being made and the stone extracted, it was found to be four to five centimetres in length, bean-shaped, uneven in surface, yellowish-white in color, and composed of tribasic phosphate of calcium. A curious circumstance was the persistence, though much mitigated, of the pre-menstrual pain, due, Chevallereau thinks, either to the formation of a new stone or to the menstruation alone.

CHRONIC MYOSITIS.—Gies (*Deutsche Zeitschr. f. Chir.*; from *Cbl. f. Chir.*, No. 39, 1879) saw a painful diffuse swelling, hard to the touch, develop during four weeks in the lower half of the thigh, in a man of 48. Treatment, internal and external, had little effect. An incision showed the muscular structure firm, hard, and waxy to the bone. The diagnosis of rheumatic induration of the muscle was made. Massage was followed by cure. The author gives the literature of myositis.

SYPHILITIC DEFORMITIES OF THE CRANIUM IN NEW-BORN INFANTS.—M. Parrot (*Le Progrès Méd.*, 1879, p. 629) describes a deformity of the cranium in very young infants, the subjects of hereditary syphilis, which he regards as characteristic. One or two months after birth, the presence of osteophytes, developed more particularly about the fontanelles, may be observed. These increase in size, and end by producing a deformity of the cranium so typical that the presence of syphilis may be inferred in infants who fail to show any lesion of the cutaneous or mucous surfaces.

AN UNUSUAL FRACTURE OF THE FEMUR, WITH PSEUDARTHROSIS—OPERATIVE TREATMENT OF FRACTURE OF THE NECK OF THE FEMUR.—Trendelenburg, at the recent congress of German surgeons (*Cbl. f. Chir.*, No. 39, 1879), described the case of a man,



56 years of age, who, nineteen weeks previously, had suffered an oblique fracture of the femur, penetrating the knee-joint, and resulting in a false joint. The limb could be lengthened and shortened, and it seemed as if the point of the upper fragment could be moved about in the knee-joint. Trendelenburg opened the joint by Langenbeck's resection procedure, extracted a bit of the capsule, which had become wedged between the fragments, and riveted the latter together within the joint with an ivory peg. The wound healed without reaction, the bones consolidated, and the joint retained its mobility.

Fortified by the now ascertained fact that joints can be opened without danger when antiseptic precautions are employed, Trendelenburg took up the old notion of Langenbeck, that in cases of intracapsular fracture of the neck of the femur a long incision, as if for resection, could be made, and, the capsule being opened, the fragments of bone could be fastened together by means of ivory pegs.

At the same meeting, Langenbeck spoke of the case of a pseudarthrosis of the neck of the femur following fracture, in a person 50 years of age, which he had treated in a similar manner. The trochanter was laid bare by a small incision and then a hole bored through and through both the neck of the bone and the fragment, and the ends were fastened by means of a silvered screw. Unfortunately, hospital gangrene supervened and carried off the patient.

**PHYSIOLOGICAL EFFECTS OF FORMIATE OF SODIUM.**—Arloing (*Acad. des Sci., Bull. Gén. de Thérap.*, September 30, 1879, p. 277) finds that if formiate of sodium is gradually introduced into the veins of the dog or horse, the heart beats more slowly, the capillaries of the lungs and of the circulation generally dilate, arterial pressure is diminished, and the diastolic or constant rapidity of the course of the blood in the vessels is augmented in the centrifugal ones. A large dose causes acceleration of the heart's action, while the systole loses its energy. If the formiate of sodium is introduced in very large amount into the interior of the right ventricle, it produces slackening or arrest of the heart's action. This arrest may be permanent, or, if the dose has not been too large, may be succeeded by the phenomena produced by ordinarily large doses.

Small doses augment the number and

amplitude of the respiratory movements. Medium doses lengthen the respiration and cause a succession of quick movements, separated by deep inspiration and prolonged expiration. Large doses accelerate the respiratory movements and diminish more and more their fulness. Very large doses produce a short arrest in expiration; the respirations soon recommence with great rapidity and gradual increase in fulness. After twenty or thirty seconds these are replaced by slacking and diminution in fulness of the thoracic movements, with a tendency to pause at expiration.

Formiate of sodium is toxic in the dose of fifteen grains to every two pounds of the animal, the respiration becoming rapid and the heart slow.

Formiate of sodium causes a decided reduction in animal temperature, and may be used instead of salicylate of sodium, because it does not, like the latter, cause congestion of the kidneys and changes in the heart.

**SULPHATE OF ZINC AND ALCOHOL IN FUNGUS SYNOVITIS.**—M. Le Fort (*Soc. de Chirurgie, Bull. Gén. de Thérap.*, September 30, 1879, p. 281) has for several years past made use of injections of alcohol and sulphate of zinc in white swelling of the knee. In one case, where the knee-joint was full of fungosities, and the plaster splint, tincture of iodine, and the actual cautery had failed to give any good result, a twenty-per cent. solution of sulphate of zinc, in the proportion of eight drops to three quarts of alcohol, injected in small quantity and repeated a number of times, produced a cure. M. Després thinks this method is not permanent in its effects. He injected iodine in one case successfully, but the patient returned five years later with the knee-joint full of osteophytes.

**CONGENITAL ABSENCE OF THE SPLEEN.**—Koch and Wachsmuth (*Le Concours Méd.*, 1879, p. 81; from *Berlin. Klin. Wochens.*) cite the following curious case observed in the hospital at Altona. A man of 40, attacked by typhoid fever, was examined with a view of confirming the diagnosis by percussion of the spleen, when dulness was found to be entirely wanting in the region usually occupied by this organ. The patient died, and at the autopsy no trace of the spleen could be found, the splenic artery also being absent. The other abdominal organs appeared quite normal.

## PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, NOVEMBER 8, 1879.

### EDITORIAL.

#### SANITATION IN NEW ORLEANS.

SOME of the special problems offered to the hygienist for solution are very curious. In New Orleans bats thrust themselves forward most annoyingly and most immodestly. According to a recent report of an inspector of the Board of Health, seventy-seven barrels of bats' dung were some months ago removed from the upper rooms of a certain school-house; nevertheless, under the efforts of the swarms of bats which choke up these lofts, the floors are now three inches deep with guano. The roof also leaks, and the fertilizing solution has permeated the lower rooms, until teachers and scholars are prostrated with disease.

We gather also from the report of Dr. C. B. White a very striking instance of the value of sanitation. Formerly certain groups of tenement-houses, situated in a very low portion of the Third District of New Orleans, were notorious as centres of sickness and death, the mortality among their inhabitants being excessive. In 1873 between one and two hundred of these houses were destroyed by a conflagration. In re-erecting them, great care was taken, by filling up lots with new sand, by elevating foundations, etc., etc., to overcome the natural deficiencies of the site. The result has been that, whilst in the last few years the mortality percentage of the general city has been 32.73 per thousand, in the reconstructed quarter it has only been 6 per thousand. We should think, with such a case, that Dr. White ought to be able to get his desired tenement act.

ANOTHER RECRUIT.—The good work goes on. The Detroit Medical College

has announced its adoption of the three years' graded course of instruction. Each such announcement tightens the cord about the necks of all medical colleges which still require only two years' attendance and still desire to be called respectable.

### CORRESPONDENCE.

#### LONDON LETTER.

THE session of 1879-80 has now got well entered on its way, and a number of young men are at work—hard, we hope—mastering the preliminaries of a medical education. The entry at the different medical schools has been unusually large this year; and the explanatory hypothesis of this inrush to the ranks of medicine is, that the existing depression in commerce and in agriculture has comparatively closed these avenues for a livelihood, and that a number of youths who would normally have become traders and agriculturists have cast in their lot with medicine. We have thus a proportion of freshmen who have not thought about devoting themselves to a medical career, but who turn to medicine merely as a preferable alternative to other ways of making a living at the present time. Whether such additions to our ranks will furnish much desirable material or not may not be affirmed. There is ground for a suspicion, at least, that for many of these youths medicine will never be more than the means of making a living. Dr. Coupland, at the Middlesex Hospital, seemed to be under the influence of such impression when, in his introductory address, he urged upon his audience steady industry, and insisted that if they were not ready to work earnestly they had better abandon medicine for some more congenial and less exacting vocation. Certainly there is little prospect of 1879-80 entries resulting in a "comet year" for vintage wines of medicine. It will be interesting to trace the future of the men entering this year.

At University College Hospital, Professor Thane reviewed the history of this memorable little hospital. Commencing its career modestly as the North London Hospital, it became affiliated to the college in Gower Street, and entered on a remarkable career. Something was said about the present condition of this medical school in a recent letter, and it was then pointed out how conspicuous a position it held in medical teaching. Containing scarcely more beds than are allotted to several surgeons individually at the large hospitals, the teaching of University College Hospital goes to all parts of the globe. Probably no single school has in so short a career ever before exercised such a profound influence upon medical teaching. Professor Thane looked

back with pardonable and intelligible pride upon the early career of the college. The Universities of Oxford and Cambridge offered very inefficient and unsatisfactory training for medical students; for medicine has never been able to flourish under the upas-tree shade of theology at the English universities. So medicine was taken up by the more liberal and advanced University of London; and here its growth has been most vigorous and satisfactory; and its vitality is assured. The first lecture was delivered in 1828, by Sir Charles Bell, whose work on the Hand is so well known. The first chair of Pathological Anatomy was instituted here, and Sir Robert Carswell, famous for his researches in tubercle, was the first occupant. Here Robert Liston, of surgical fame, first delivered a systematic course of clinical lectures; before this time clinical teaching had been irregular and somewhat fortuitous. Of old, clinical education, such as it was, was terribly expensive, and only within the reach of the more affluent students. But a new plan was adopted here: the offices of clinical clerk, dresser, and house-surgeon were thrown open to competition, and purchase was abandoned. The excellent effects of the change were soon manifest, and the students of University College Hospital have attained a high reputation for their medical attainments. Small as this hospital is, it can not only provide itself with capital teachers, but can even help out other schools who cannot find efficient teachers in their own ranks. For long the hospital was kept alive by the teachers sacrificing their fees for clinical teaching to the hospital's needs. In this way no less a sum than £86,000 in hard money has been given to this hospital by its medical officers. And this is one strong factor in the success of this hospital as a medical school. At University College Hospital the medical staff are a power in the place. They can assert themselves, and make themselves heard upon occasion: consequently the place flourishes. Contrast it with the palatial St. Thomas's on the Thames Embankment. Imposing with its seven pavilions, conspicuous from its position, respectable from its history in the past, St. Thomas's is withering. The lay administrators are there too dominant, and possessed of too much power. The medical staff is simply snubbed; and consequently men hesitate to offer it their services. Stately as it looks, many of its wards are closed; and, what is worse, its students stand lowest in the percentage of passes at the various examinations,—the lowest of all the schools in London. That is the position to which the whilom proud St. Thomas's has been brought,—by whose sins of commission and by whose sins of omission I do not know, not having been behind the scenes, and possessing no special knowledge, hearing only the rumors which have got about from time to time, especially at the time when Robert

Barnes left it for St. George's. Melancholy pervades the mind when one looks at the history of the grand old hospital and thinks of its past. It looks like an old oak with blasted branches,—a grand tree, but shrinking. Its closed ward gives it a dismal aspect, and makes the resemblance of a decaying oak most fitting. While University College is a vigorous tree, growing grandly in free air, the other is being blighted by the closeness which surrounds it. But it is unnecessary to study the pathological anatomy of St. Thomas's too closely. At University College the latest addition has been a professorship of Hygiene and Public Health, worthily filled by Professor Corfield. The lecturer said the public advantages which were anticipated from the establishment of this medical school had been realized. The character of medical education had been elevated and its range extended. He claimed for his college that the improvements in medical teaching which had taken place during the last half-century had been in a very great degree the result of the example set by it; and he claimed no more than was its due.

At King's College Hospital the address was delivered by Professor Duffin, who prefaced his special remarks by some good, solid, sensible advice to the new-comers. He then referred to the work of the medical tutor who aided them in their studies. He claimed for class examination and tutorial teaching that they not only acted like pass-examinations in protecting the public from ignorance and negligence, but that they gauged knowledge with a view to correcting deficiencies, making it thorough and accurate, and insuring that the progress is safe and sound. He then proceeded to demonstrate how a knowledge of biology, of physiology, and of pathological anatomy must precede any rational therapeutics. He said, "There is no royal road, no all-embracing theory according to which we can predicate what will be the action of any given drug, still less which will permit us to infer that such and such medicines are and must be antidotal to any given diseased state. Such crude speculations are still too rife among us, and they are eagerly caught up by a certain section of the public. They are usually the results of hasty generalizations, formed on a few physiological and pathological facts of doubtful value; they represent the desires rather than the acquisitions of mankind. Like every other science, therapeutics must be built on observation, careful, accurate, and far-seeing, and on experiment defining the conditions within which the agent to be employed is to do its work. The careful physician, although confident in the results of precise experiment, will also strictly observe its limits. Should he feel himself called upon to apply them under new or ill-defined conditions, he will do so with the utmost caution, feeling his way step by step, as the additions

to his knowledge will permit." This is all very right and sound, but it appears to me that the fear is rather that men will just be so desperately cautious that they will never do anything. The additions to their knowledge made by many men are so small that if they are to be so careful about its application they will not get very far in the course of an average lifetime. Somebody must risk something if any decided advance has to be made. When I had a grain of sulphate of atropia injected all at once into the arm of a woman dying of opium-poisoning, caution, some may think, was not uppermost. Sometimes, however, in therapeutics, as in war, true caution means energetic action; and familiarity with the indications of failing respiration and circulation in animals dying from lethal doses of aconite, and with the effects of atropia in restoring the animal to life, told me in unmistakable accents that nothing but a huge dose of atropine would be of the slightest avail; and the result showed that the dose given was none too much. The woman got well, without any symptoms of belladonna-poisoning.

To follow Dr. Duffin further,—the utility of a knowledge of the physiological antagonism of drugs was then descanted upon, after which he concluded with a fling at homœopathy, which is at present in a rather languishing condition, and finding out that a little of what it has had the impertinence to call "allopathy" is very useful at times.

At the Durham University College of Medicine, Newcastle-upon-Tyne, Dr. David Drummond, Lecturer on Physiology, delivered an able and eloquent address, in which he first pointed out the value of sustained industry, and pointed to the career of the illustrious Hey, who worked ten long years before he could secure a small competence, but success came at last. Dr. Marshall Hall gave twenty-five thousand hours to the contemplation of reflex action, and that, too, when engaged in busy practice. Sir James Simpson and his college friend Dr. John Reid, afterwards Professor of Anatomy at St. Andrew's, commenced their work at an hour that would be considered rather early even by a German professor. John Hunter worked long hours, and so did Sir Astley Cooper, from the very commencement of their student career. Then he insisted upon the importance of cultivating the habit of close observation. Galen observed so carefully that he was the author of several works at twenty-one. Bichat died at thirty. Stokes was only twenty-three when he fought so stoutly on behalf of the stethoscope. He then told how William Hunter and William Cullen went into partnership in order that each, on alternate winters, could go to a medical school to study, while the other looked after the practice,—a scheme which might be more copied with advantage.

The discussion on intestinal obstruction at the annual meeting of the British Medical As-

sociation in 1878 has already borne fruit in a very satisfactory manner. Not only have operative measures been more generally adopted, but the peritoneum is found to behave itself very much better nowadays than it used to of old, when it had a very bad reputation. Any injury of the peritoneum was thought to entail imminent danger, but now it is sponged out without provoking inflammation even. Mr. Jessop, of Leeds, enters an indignant protest against the application of the term "unjustifiable" to exploratory incisions of the abdomen in obscure cases. In cases that are in their nature necessarily fatal, he argues, the operation cannot further endanger life, and the operator has the satisfaction of knowing this. In other cases immediate relief can be furnished where nothing short of operative measures are of the slightest avail, as where a band of organized lymph encloses a coil of intestine; his experience at the post-mortem table telling him that several cases there met would not have come there had an exploratory incision been made and the cause of obstruction removed.

Dr. Jacobson, of Guy's Hospital, relates a case which, however, terminated fatally ten days after operation: nevertheless he advocates the adoption of operative measures. He thinks that what betwixt recent great advances in the surgery of the abdomen and the progress of antiseptic surgery, operative measures for the relief of intestinal obstruction will become quite common, and will furnish most beneficial results in many cases. Even where it is not necessary to make an incision in the abdominal walls, operative measures, including liberties taken with the peritoneum, may be indicated. Thus, Dr. Broadbent relates a case where puncture of the small intestine gave great relief in a case of intestinal obstruction in an elderly lady. A shrivelled ovarian cyst constitutes a tumor in the right inguinal region, which presses upon the bowel. In consequence of this she has several times suffered more or less severely from intestinal obstruction. At last an obstruction had persisted for three weeks in spite of opium and belladonna, and it was determined to puncture the intestines with a long aspirator needle. The aspirator was used at first, but soon was found unnecessary. An enormous amount of gas escaped, giving the patient great relief. Two days later, fæces and flatus began to pass naturally. A few months later, a similar attack came on, and, after some days of unsuccessful medicinal treatment, at the patient's earnest request punctures were again resorted to, with excellent results. The discharge of gas was followed by a copious evacuation during the subsequent night. A third time puncture alone could afford relief. Dr. Broadbent has used such puncture of the abdomen in several cases, and so far has not seen any injurious result follow therefrom. He, however, observes several precautions. 1. He lessens



peristaltic action by a full dose of opium, while no food is given for some time before the operation. 2. He selects a coil of intestine which contains gas only, and not liquid. 3. He pierces the coil exactly at its most convex part. The spot chosen for the puncture should be as nearly as possible over the centre of a coil which does not roll about, and, by preference, in the linea alba. 4. He exercises great care and patience during the escape of the gas. As the gas escapes from the coil selected for puncture, it will collapse under pressure from neighboring coils, and the flow through the needle will cease. Very soon, however, the air in the intestine will distribute itself and enter the empty portion, when it will again escape. It is better not to put on a bandage. He concludes by suggesting that such puncture may often usefully precede other operative measures, as inflation, taxis, etc., when the gut is imprisoned.

J. MILNER FOTHERGILL.

## PROCEEDINGS OF SOCIETIES.

### PHILADELPHIA COUNTY MEDICAL SOCIETY.

A CONVERSATIONAL meeting was held at the hall of the College of Physicians, Philadelphia, September 24, 1879, Dr. Henry H. Smith, President of the Society, in the chair. The paper of the evening, on "The Treatment of Post-Nasal Catarrh,"\* was read by its author, Dr. W. R. D. Blackwood, to whom a vote of thanks was unanimously tendered by the Society for the interesting and practical manner in which the subject was presented.

Dr. Carl Seiler had seen a large number of cases during the last two years at the dispensary service of the University of Pennsylvania and elsewhere, and had never met one where there was such a deformity of the septum as to require a surgical operation for the relief of post-nasal catarrh. He quite agreed with the writer of the paper, that the instruments needed are very few and simple. A nasal speculum, a laryngeal mirror used in a reversed position, and perhaps a wire loop to hold the uvula to one side, are all the instruments needed for an ordinary examination.

He condemned the frequent use of strong applications, which should be resorted to only where there are abrasions or spots of ulceration; they are not beneficial when made to the whole mucous surface. In regard to the nasal douche, he would not think of depending upon it as a remedy; it is simply a means of cleansing the nasal passages. It is true that disinfecting solutions can be used in the douche, but it should not be relied upon as a substitute for local applications to special por-

tions of the membrane. In making these applications he disliked cotton, as it allows some of the fibres to remain and keep up the irritation. In a number of cases he had noticed that the inflammation appeared to be located principally around the Eustachian openings, and applications carried directly to this spot were followed by good results.

Dr. S. D. Risley had noticed that cases of chronic aural catarrh are frequently associated with disease of the vault of the pharynx and deformities in the nasal passages; in some cases this latter condition was so marked that he had been unable to introduce his Eustachian catheter through the nasal chamber. He had not noticed the connection between the two disorders until it had been pointed out by Dr. Allen. He was thoroughly convinced now that in the great majority of cases of this chronic catarrhal trouble the cause is in deformities of the nasal chamber, chiefly a deflection of the vomer, which slight in health may be more marked when swollen by inflammation. If the swelling be sufficient to bring the septum in contact with the turbinated bones, the particles of dust inhaled remain on the surface and keep up the irritation, and eventually ulceration is produced.

In the treatment he prefers the post-nasal syringe to the nasal douche. Ulcerated spots must be sought for and treated, and the cases will then recover; but until the trouble in the nose is also removed he had been unable to relieve aural catarrh permanently. He mentioned a case of obstructed tear-duct, in which this deviation of the septum was present to such a degree as to bring it in contact with the middle turbinated bone; the opposing surfaces were ulcerated. With a few applications the case recovered. The lachrymal obstruction got well without further treatment. In another patient, an old gentleman, there were nervous symptoms, which led him to make an ophthalmoscopic examination, when he found the appearance of descending neuritis; there was also a free secretion from the nasal passages, and a slight cough. The patient was given iodide of potassium and bichloride of mercury, under which he greatly improved. In the course of a few months he came back with tinnitus in both ears and cerebral symptoms returning. Upon examination of the nose, ulcerated surfaces were found which evidently kept up the trouble in the Eustachian tubes. Under appropriate local treatment the tinnitus disappeared in about two weeks, and the patient became entirely well. He had previously been using the nasal douche for several years without advantage. The speaker gave, as the result of his observation, that the nasal passages should always be examined in cases of aural catarrh. In reply to a question from the chair, he said that where the septum is deflected to one side there is a corresponding depression on the other side.

\* See page 55 of this volume.

Dr. Henry H. Smith said that where no depression occurred, there might be a separation of the lamina of the septum.

Dr. Seiler reported a case in a boy where the right nostril was occluded, without a depression in the septum, upon the left side. Dr. Agnew believed the disease to be a new growth from the cartilage, but declined to operate. The growth has since diminished slightly under the use of iodide of potassium. The case might be explained by assuming a separation of the lamina, as suggested by the chairman.

Dr. Henry H. Smith said that in one or two cases of injuries of the nose he had seen a separation of the lamina of the cartilaginous septum; also in cases of abscess between these two layers. In both conditions the nose had afterwards regained its proper shape.

Dr. Risley had noticed, in a case of lateral deviation with ulceration, a perforation of the septum.

Dr. O. H. Allis said that he had never seen a case where the septum held its way directly through the middle of the nasal passages. He believed that a physiological reason existed why one chamber should be used in breathing ordinarily, while the other was comparatively secluded and protected. He had noticed that in smelling, when a good impression upon the olfactory nerve was desired, the head is generally inclined to one side and a strong inspiration taken. In this way the air is forced into the upper portion of that side of the nose that is ordinarily less accessible and is therefore more sensitive.

#### A POINT IN THE DIAGNOSIS OF FRACTURE AND DISLOCATION—SURGICAL APPLIANCES EXHIBITED.

Dr. John H. Packard said that in cases of fracture occurring near a large joint it is sometimes very difficult to tell whether there is dislocation attending it or not. He therefore desired to call the attention of the Society to a procedure that he had found useful. In cases of fracture without dislocation, he had found that by grasping the limb firmly it could passively be made to pass successively through the normal range of movements proper to the joint. Should fracture coexist with dislocation, the range of motion would be decidedly restricted and the limb would be suddenly checked in a state of partial flexion or extension. He had also noticed that in dislocations some of the movements of the joint can be voluntarily made without pain, while in fracture, particularly of the shoulder or hip-joint, motion in any direction causes pain. He also asked permission to exhibit a portable gallows for swinging a fractured leg, which could be readily removed to different parts of the room. To this he had also fastened a rope with a handle, by which a patient could lift himself in bed. He also exhibited

the fracture-bed used in transporting a lady to the sea-shore.\*

#### RECTAL ALIMENTATION BY BLOOD.

Dr. M. O'Hara inquired whether any of the members had had any experience in the use of defibrinated bullock's blood as a nutrient enema. In a case of chronic syphilitic contraction of the œsophagus, under his care for a number of months, finding that she did not have enough nourishment with milk, broths, etc., he decided upon using the blood as mentioned, and had observed great benefit from it. He had also given in it fluid extract of rennet with three or four drops of hydrochloric acid. The patient had now been on the use of the blood enemata about six weeks, given every three or four hours, four ounces at a time. Defecation occurred only once or twice in a fortnight, as there seemed to be very little waste material. The patient had very much improved.

#### A CASE ILLUSTRATING THE BENEFIT OF LOCAL TREATMENT IN THE NON-TUBERCULAR FORM OF PULMONARY CONSUMPTION.

Dr. Frank Woodbury presented a patient for examination by the members of this Society, after reading a brief history of the case.

Henry C., 33 years of age, born in Germany; single; occupation, that of cornet-player; admitted into the German Hospital of this city May 6, 1879. Father still living, 73 years of age; was "never sick in his life." Mother died of pulmonary disease, attended with cough, spitting of blood, and emaciation. Lost one brother, at 5 years of age, from unknown cause; has two other brothers and a sister living, and in good health.

His present sickness began shortly before admission to the hospital, last spring. He had always been healthy, but caught a severe cold and cough in February, from which he believed that he had perfectly recovered, when, about the 1st of May, he experienced severe pains in the right shoulder, which he thought were rheumatic. In the course of a few days he noticed that he was feverish and losing his strength, and at this time he came into the hospital. One week after admission he had a small hemorrhage from the lungs; he stated that he had never had one before.

When the wards came under my care, July 1, 1879, C. was expectorating freely, and had been subject to repeated hemorrhages since admission. He was almost continually confined to his bed, for any unusual exertion or exposure brought on a hemorrhage. He had night-sweats, was prostrated, and had lost nearly twenty-five pounds' weight in three months.

The physical signs obtained by auscultation and percussion were those of consolidation of the upper half of the right lung, with bron-

\* See last volume, page 628.

chial breathing and blowing expiration of relatively high pitch under the middle of the clavicle. Mucous râles, large and medium size, were also heard in this situation. There was exaggerated breathing at the left apex, with a few signs of chronic bronchitis.

About the middle of July he was so evidently sinking from the repeated hemorrhages and constant cough that had resisted previous treatment that it was necessary to make a radical change. Believing that the left lung was sufficiently sound to carry on respiration, it was decided to strap the right chest by adhesive plaster, so as to keep the ribs on the affected side at rest, and the straps were applied, on July 15, as in the treatment of fracture of the ribs. Being renewed from time to time, these straps were kept on for four weeks, when they were considered to be no longer necessary. To reduce the congestion of the lung and prevent hemorrhages, he was at the same time directed to apply an ice bag enveloped in flannel to the upper part of the right side of the thorax. He kept this on for half an hour, at first, every afternoon, but gradually increased it to two hours at a time, with the most marked effect. He has had but one slight hemorrhage since using the ice in a period of two months. During this time he has gained the surprising amount of twenty-four pounds in weight, notwithstanding the facts that he has an open issue in his right arm, which has discharged a couple of drachms of pus daily for the last two months, and, secondly, that he had one hemorrhage a month ago, which, although small in amount, required the stoppage of his medicines and interfered with the course of his treatment. His improvement was so marked that he was directed to weigh himself on Wednesday of each week. It is to be noted, however, that the improvement is even greater than the figures show, since the first weighing was made after this treatment had continued for two weeks and his improvement had excited remark. He weighed, July 31, 122½ pounds.

On August 6 he had gained 2 pounds.

"	13	"	"	5	"
"	27	"	lost	½	pound.
On Sept.	3	"	gained	1½	pounds.
"	10	"	"	4½	"
"	17	"	"	6½	"
"	24	"	"	3	"

Total gain, 21½ pounds.

He weighs at present 144 pounds.

His internal treatment has been very much the same as before the local treatment was adopted. Cod-liver oil and malt-extract, four ounces of whisky in milk-punch, small doses of arsenious acid and iron, added to the well-known pill of Niemeyer (containing quinine, digitalis, and opium), and fluid extract of ergot to reduce the copious expectoration, have been the magistral remedies used,—not forgetting, however, the use of atropia (gr. ʒʒ) at bed-

time, which effectually controlled the night-sweats, and inhalations of lime-water, and, at one time when the breath was offensive, of salicylate of soda in the steam atomizer, which were useful adjuvants. He has also been repeatedly blistered under the right clavicle.

In conclusion, I would take occasion to insist upon the value of a well-ventilated sleeping-apartment in the treatment of these cases,\* and, secondly, upon a liberal supply of nitrogenous food to supply the daily waste caused by the free albuminous expectoration. In all such cases, with the view of supplying this loss, I have fallen into the habit of directing the use of from two to four raw eggs daily, in the food, or with brandy-punch. While the albumen is nutritious and easy of assimilation, the oil contained in the yolk may supply the place of cod-liver oil where the latter cannot be used. It may be mere theory, but I have fancied that the lecithine or phosphorized fat contained in the yolk may be a valuable agent in improving nutrition, especially of the nervous system, as lecithine is a well-known constituent of neurine, and is found in all the nerve-centres.

As regards the diagnosis of this case, it is evident that it belongs to the inflammatory and not to the tubercular form of phthisis. At the same time, it does not come exactly under either of the headings proposed by Ruehle in his monograph, in Ziemssen's Cyclopædia, of uncomplicated inflammatory diseases of the lungs. In its pathology, to my mind, it is neither simple chronic apical pneumonia, broncho-pneumonia, nor apical catarrh. Grouping, as is generally done, the last two classes together as chronic catarrhal pneumonia, and contrasting them with the first, which may be considered as synonymous with interstitial or fibroid phthisis, it appears that symptoms are present that would warrant placing the case under either head, but, from the amount of consolidation and the evidence of some coexisting bronchiectasis, I would consider this case as an instance of chronic apical pneumonia (or fibroid phthisis) complicated with considerable bronchial catarrh or bronchorrhœa. The pleuritic stitches (pseudorheumatism) early in the history of the case would also favor this view. The temperature record has been kept continuously, and is submitted herewith for examination:

The temperature at first was irregular, advancing to 103° and 103½°, as in ordinary cases of pneumonic phthisis; for more than a month now it has ranged between 98° and 99°.

The fact of there being apparently a family history of lung-disease renders the case doubly interesting as suggesting a tubercular tendency in the patient, but which may have been kept in check by the constant playing on a wind-

\* The hemorrhage that occurred about August 12 was thought to have been caused by overcrowding of the wards: at that time he was removed to a separate room, and has been doing uninterruptedly well ever since.

instrument, which has favored the development of his chest. It is possible that a deposit of tubercle may yet take place in our patient, if it has not already occurred; and, according to Niemeyer, this is now his greatest danger.

[A recess of ten minutes was taken by the Society for the purpose of examining the patient.]

#### DIAGNOSIS BETWEEN LUXATIONS AND FRACTURES NEAR THE JOINTS.

Dr. Packard called the attention of the Society to a diagnostic mark between luxations and fractures. He had noticed it especially in the neighborhood of the hip-joint. It was that in the former class of cases a certain limited amount of voluntary motion was possible, the head of the bone simply taking a new *point d'appui* in its false position. This was not, as a general rule, the case in fractures, either for want of sufficient purchase or because of the pain caused by any such attempt. Although, indeed, patients with fracture of the cervix femoris could sometimes walk, this was always by means of the strong ligamentous attachments and the impaction of the fragments. Walking under such circumstances was very difficult and attended with a certain amount of pain. Dr. Packard believed it would be found, even in these cases, that the effort to raise the knee in bed would be almost, if not quite, impossible, while in luxation—at least when the head of the bone was either on the dorsum, in the sciatic notch, or in the thyroid foramen—this motion could be accomplished without serious difficulty. He did not know how far the statement was applicable to the diagnosis of injuries about other joints, but within two weeks he had met with two illustrative cases in luxations of the hip.

#### TWO CASES PRESENTING SYMPTOMS OF ACUTE OBSTRUCTION OF THE BOWELS.

Dr. Charles B. Nancrede reported a case illustrating the difficulty of recognizing conditions of the intestines that are commonly supposed to be easily detected.

A young German, about 25 years of age, who had never suffered from any hernial trouble previously, was kicked in the lower part of the hypogastric region by a horse, one calk striking over the left inguinal canal, and the other tearing through the abdominal muscles about an inch above the right inguinal canal, as the post-mortem proved.

He was brought into the Episcopal Hospital, where he soon developed symptoms of peritonitis, which was not apparently severe, as only eight grains of opium were required during the twenty-four hours to render him comfortable. There was occasional vomiting when the stomach was overloaded. He apparently improved, the temperature and pulse both fell, and Dr. Nancrede felt reasonably confident of his eventual recovery. On the third day, however, he commenced to vomit

matter which had a distinctly fecal odor. The next day he was collapsed, and at intervals vomiting stercoraceous matter.

A careful examination for a strangulated hernia was made, without success. The scrotum was still swollen, a reducible swelling existing on the left side, the finger readily entering the inguinal canal, the tumor retreating with a crackling feel, like emphysema, different from the characteristic gurgle of reduced gut. On the right side a similar swelling was found in the line of but above the inguinal canal. This did not entirely yield under taxis, leaving what felt like an empty hernial sac.

The right tumor was carefully cut down upon, but when the peritoneum was opened no strangulated gut was found, but everything was so bound down as to preclude any idea of search for an intra-abdominal obstruction.

At the post-mortem the muscles at the seat of injury were lacerated, the perineum was highly inflamed, and a fluid having a fecal odor was encountered in its cavity. On drawing the intestines out, they were found matted together with lymph, but there was no strangulation, the intestinal tube allowing water to pass freely through it. At several points all the coats of the bowel were inflamed.

He reported this case to recall to the attention of the members that enteritis may cause all the symptoms of obstruction through intestinal paralysis. This fact should be borne in mind, as we might otherwise be inclined to subject the patient to the risks of a very serious operation.

As a companion case to the above, he mentioned one that occurred this summer in the practice of another gentleman, and which he had had the opportunity of observing. A little boy 7 years old presented the symptoms of acute intestinal obstruction. As his brother had died of intussusception of the bowels a year previously, the parents were perfectly willing to have abdominal section performed, if necessary. The introduction of O'Byrne's tube into the rectum and several large enemas brought away a mass consisting principally of tomato-skins, which had become impacted in the bowel at a point which was probably paralyzed by enteritis. The patient recovered.

#### PATHOLOGICAL SOCIETY OF PHILADELPHIA.

THURSDAY EVENING, SEPTEMBER 11, 1879.

THE VICE-PRESIDENT, DR. JAMES TYSON, in the chair.

*Hepatic abscesses from a case in which there were cystic ovarian tumors containing inspissated pus.* Presented by Dr. LOUIS STARR.

I AM indebted to Dr. Sinkler for the opportunity of presenting these specimens. The clinical notes were taken by Dr. H. D.



Harvey, resident physician at the Episcopal Hospital.

Kate —, *æt.* 35, was admitted to the medical ward of the Episcopal Hospital on August 16, 1879. Her family history was good, all her immediate relations being alive and well except her father, who had died of dysentery. She had always resided in Philadelphia, had been temperate in her habits, and had never had syphilis. Exclusive of the diseases incident to childhood, she had enjoyed good health until the commencement of her last illness, in June, 1878.

At that time she noticed a small, painless tumor in the left iliac region, her appetite failed, she had considerable flatulent distention after eating, and her bowels became constipated. The tumor slowly increased in size. In May, 1879, the catamenia, which had previously been regular, stopped, and she began to have tensive pain in the tumor varying considerably in intensity, to lose flesh and strength, and to suffer from neuralgia of the left sciatic nerve occasionally severe enough to prevent her walking.

Early in August she noticed a dull pain in the right infra-mammary region, and on each of the two days preceding her entrance to the hospital she had several copious evacuations from the bowels. Nevertheless, she continued to perform her household duties up to the day of admission.

When admitted, she was very weak, her face was anxious, the conjunctivæ were slightly yellow, and the skin somewhat sallow. Her tongue was covered with a thick, brownish coating, which was dry and cracked; she had little desire for food, and there was moderate diarrhoea, the evacuations being liquid, but containing neither mucus nor blood. The abdomen was distended; the left iliac, the hypogastric, and the umbilical regions were occupied by a tumor, which was dull on percussion, tender to the touch, and gave to the finger a sense of firmness, with indistinct fluctuation; the remaining regions were tympanitic. Her breathing was hurried, and there was dull pain in the right infra-mammary region, uninfluenced by the respiratory movements. The pulse was frequent and feeble.

On August 17 and 18, the pain in the tumor became greater and the abdominal tenderness more extended.

On August 19, the pulse was 120 and very weak; there was flushing of the face and considerable elevation of the surface temperature, followed in the afternoon and evening by profuse sweating. During the night there were two large evacuations from the bowels, consisting of little else than dark-colored, clotted blood.

On the morning of the 20th the patient complained of great pain in the lower portion of the abdomen, her skin was cold and clammy, and her pulse thready. In the after-

noon there were two more hemorrhages from the bowels, and death occurred early in the evening.

An *autopsy* was made fifteen hours after death. The body was much emaciated. On opening the abdomen, a large mass was observed filling up the lower portion of its cavity and displacing the intestines upward and to the right. This mass in reality consisted of two tumors bound together by narrow bands of fibrous tissue. Both tumors were lobulated and fluctuated indistinctly under the finger. The smaller of the two occupied the left iliac fossa and the left iliac region, was about four inches in diameter, and was loosely connected with the left side of the body of the uterus; the larger occupied the hypogastric and umbilical regions, was about five inches in diameter, and was more intimately joined with the fundus and the right side of the uterus. The dilated right Fallopian tube could be traced along the under surface of the larger tumor, and the left Fallopian tube could be traced for a short distance into the smaller tumor. Upon section, the tumors were found to be cystic in structure; their walls were about one-eighth of an inch in thickness, and they contained a soft, putty-like substance resembling inspissated pus, the material filling the larger sac being white and firm, while that in the smaller was more liquid and yellowish in color. The uterus appeared to be normal. The tumors, together with the uterus, weighed a little more than seven pounds.

The *liver* was somewhat enlarged, the right lobe extending from the costal border upward as high as the fourth rib, and the margin of the left lobe being too far to the left. The upper right postero-lateral surface of the right lobe was adherent to the diaphragm and abdominal wall, and considerable force was required in removing the viscus. In doing this the hepatic tissue was torn, opening a large abscess situated superficially in the upper posterior part of the right lobe, and giving vent to a quantity (estimated at one pint) of inodorous, thick pus, containing numerous shreds of partially-broken-down glandular tissue. The abscess measured six inches in transverse and five inches in antero-posterior diameter; its superior wall was scarcely one-fourth of an inch in thickness, and its internal surface was ragged, being formed of softening tissue. A short distance behind and below this abscess was a second abscess, entirely isolated, irregular in shape, and about as large as a walnut. The substance of the liver in the neighborhood of the abscesses was very much softened and engorged with blood. The gall-bladder held a small quantity of viscid, bile-stained mucus; its walls were thickened in an appreciable degree, and the reticulation of the mucous membrane was unusually well marked. The bile-ducts were patulous. The liver weighed five and a quarter pounds.

The stomach and intestines were not examined.

The kidneys and the thoracic viscera were healthy.

A microscopic examination made by Dr. Simes showed that the material contained in the ovarian cysts was composed of pus corpuscles, granular debris, and compound granular corpuscles.

*Remarks.*—There can be no doubt that the abscesses in this case were pyæmic in nature, although the anatomical characteristics of pyæmic abscesses of the liver, viz., multiplicity and smallness in size, were absent. The absence of these characters is, I think, not unusual; for example, in three other cases\* which have come directly under my observation there was in one a single large abscess in the right lobe, in another a large abscess in the right lobe and a small forming abscess the size of a filbert in the left lobe, and in the third there were two abscesses in the right and one in the left lobe, the largest being five inches in transverse and six inches in antero-posterior diameter, and the smallest about an inch in diameter.

In this patient, in addition to the suppuration in the cystic tumors,—a very evident source of purulent infection,—there was probably some lesion, perhaps ulceration, of the intestinal tract, though unfortunately this was not investigated at the post-mortem examination. That a lesion did exist I infer from the diarrhoea and intestinal hemorrhage which occurred a short time before death, the color of the blood showing that it came from a point rather high up in the canal, and also from the fact that there was no evidence of portal obstruction or of pulmonary or cardiac disease to cause extreme congestion of the intestinal mucous membrane and consequent hemorrhage.

From a clinical stand-point the case must be placed in the large group of *latent* hepatic abscesses, there being no symptoms indicative of disease of the liver except the slight yellowness of the conjunctivæ and the dull pain in the right infra-mammary region, neither of which is at all characteristic. On the contrary, the symptoms, and especially the physical signs, were such as to fix the attention upon the abdominal tumor.

*Case of obstruction of the bowels where laparotomy was performed.* Presented by Dr. NANCREDE.

George Ott, male, æt. 29 years, by occupation a brickmaker, was admitted to the male surgical ward of the Protestant Episcopal Hospital on the afternoon of August 19, 1879, suffering from a horse-kick in the lower part of the hypogastric region.

The pubic region was much ecchymosed,

one calk of the shoe having struck in the left inguinal canal, and the other about one inch above this spot on the right side. He had never suffered from any hernial trouble. Symptoms of mild peritonitis supervened, which were controlled by the administration of eight grains of opium per diem, with the exception of occasional vomiting when the stomach was overloaded. On the afternoon of the third day, however, the ejecta smelt stercoraceous, and by the following morning he was collapsed with undoubted stercoraceous vomiting. He now presented a swelling in each inguinal region. That on the left side receded completely when taxis was used, but with an emphysematous crackle unlike the characteristic "gurgle" of reduced gut. That on the right side could not be entirely removed by taxis, leaving a small mass which felt like a hernial sac.

After consultation, it was determined to cut down upon the right inguinal canal, and endeavor to discover the nature of the irreducible part. When the peritoneum was reached, it was black and sphacelated in parts, so that during some of the manipulations it gave way, giving vent to several ounces of stercoraceous-smelling matter. No further search for the obstructed portion of the gut was undertaken, owing to the matting together of the bowels by adhesions and the apparent demonstration of the rupture of the bowel.

Death took place seventeen hours later, and on post-mortem examination no obstructed portion of bowel was found, water passed freely through the gut, and no ante mortem rupture could be discovered. At several points the whole circumference of the gut was inflamed throughout all its coats, thus giving an illustration of what is more common than is usually suspected, viz., an obstruction of the bowels from inflammation of all its coats, thus producing paralysis at that point. The fæcal odor was probably due to the osmosis of the intestinal gases into the purulent and peritoneal fluids.

## REVIEWS AND BOOK NOTICES.

EYESIGHT, AND HOW TO CARE FOR IT. By GEORGE C. HARLAN, M.D., Surgeon to the Wills Eye Hospital, etc.

This, the fourth in Messrs. Lindsay & Blackiston's now well-known series of "American Health Primers," will certainly add to the reputation of the series. Dr. Harlan's well-deserved standing as an ophthalmologist would of course lead us to expect the adequate and correct treatment of the subject, and an examination of the primer shows that the facts have been presented in a clear, concise, and intelligible manner, without undue verbiage or excessive condensation: in fact, the literary style is excellent. We

\* Trans. of College of Physicians of Philadelphia. Third series, vol. iv.

must take exception, however, to the statement that the attempt to crowd his subject into so small a space was made by the author with a sense of the "absurdity" of the undertaking. If a book appears absurd to its author, how is it likely to strike the reader? Fortunately, Dr. Harlan's confession is to be taken in a Pickwickian sense, and we can safely recommend his little work alike to the practitioner and to the cultivated layman, with the assurance that they will find it both pleasant and profitable reading.

**ANALYSIS OF THE URINE, WITH SPECIAL REFERENCE TO THE DISEASES OF THE GENITO-URINARY APPARATUS.** By K. B. HOFFMANN, Professor in the University of Grätz, and R. ULTMANN, Docent in the University of Vienna. Translated by T. BARTON BRUNE, A.M., M.D., Resident Physician Maryland University Hospital, and H. HOLBROOK CURTIS, Ph.B. 8vo, pp. 269. New York, Appleton & Co., 1879.

**THE SAME TREATISE**, translated by F. FORCHEIMER, M.D., Professor of Medical Chemistry at the Medical College of Ohio. 12mo, pp. 195. Cincinnati, Peter G. Thomson, 1879.

Few works will better bear two translations, simultaneously published, than this admirable one of Hoffmann and Ultmann. But, as there is never a necessity for such double issue, we regret its occurrence, for the sake both of translators and publishers, and whether it be the result of accident or of design.

Prefacing an interesting historical sketch of the development of urinology, the authors introduce chapters on the histology of the urinary organs; the physiology of the excretion of urine; its physical and chemical characters, chemical constituents, normal and abnormal, and the sediment; concretions, with their analyses; reagents and apparatus for the approximate determination of the urine constituents; quantitative determination of a few of the constituents of the urine; key to the approximate analysis of the urine; general diagnosis; and diagnosis of the diseases of the urinary apparatus. Singularly, the chapter on reagents and apparatus is placed in the heart of the volume, instead of at the commencement, where we would naturally expect it.

We have not space for further analysis of the work, but would simply state that it well deserves the reputation it has already obtained abroad. It is eminently practical, and adapted, as the authors claim, to the wants of the physician and student rather than of the medical chemist, although the latter can ill afford to dispense with it.

Of the two editions the New York book is the finer in execution, being handsomely got up in large type on good paper, and has appended eight well-executed plates, each

containing two figures of urinary sediment. These are from the Atlas of Hoffmann and Ultmann, and make the volume very complete. But the Cincinnati edition is, in our opinion, more convenient, in that it is smaller and more easily handled. It has interpolated in the text, as wood-cuts, the same figures which appear in the plates appended to the New York edition, but they are coarse and inferior. Being less costly in its execution, we presume its price is less than that of its New York rival.

J. T.

**HYGIENE OF THE VOICE: ITS PHYSIOLOGY AND ANATOMY.** By GHISLANI DURANT, M.D., Ph.D. New and revised edition. New York, Cassell, Petter, Galpin & Co., 1879. 188 pages, with 7 wood-cuts.

In the preface the author states that the book is not intended as a manual for singing, but as a guide to the singer, so that he may know what he is making use of, and will only ask of each part that which it can perform, and not task it beyond its power. In reading the book, however, we find that the descriptions of the anatomy of the larynx and the physiology of the voice are too vague to be understood by the layman, and contain too many of the errors of the older writers on laryngology to be of much service to the singer. So, for instance, do we miss a description of the peculiar motion of the arytenoid cartilages, which is so important in vocalization, and find that the definition of the difference between noise and music is absolutely wrong.

The explanation of the production of the registers of the voice is by no means satisfactory; and we cannot agree with the author when he says that the soft palate and the uvula are in contact with the back of the tongue in the head-register, so that the sound is emitted through the nostrils.

In the chapter on diseases of the voice, the author makes the sweeping assertion that amputation of the uvula and excision of the tonsils are operations which should never be performed in any case, simply because they are often performed when not necessary.

In the appendix a description is given of three methods of gargling, and in one of them the remarkable statement occurs that "swallowing is unavoidable, and is caused by the opening of the GLOTTIS to give passage to the air breathed through the nose."

We also think it bad taste, to say the least, for a medical practitioner to add a list of prescriptions to a book intended for the general public, and in this case dangerous, inasmuch as many of the formulæ contain opium in considerable quantities.

There are, however, many good points in the volume which singers and public speakers would do well to bear in mind, and the chapters on respiration, alimentation, sleep, and preservation of the voice are full of sound advice to both singing teachers and pupils.

The illustrations are mostly diagrammatical in character, and are well executed, especially Fig. 5, which gives a very clear idea of the action of the crico-thyroid muscle and the rocking motion of the thyroid cartilage upon the cricoid cartilage.

The whole book presents a very neat appearance, and does great credit to its publishers.

C. S.

OBSERVATIONS ON CONTRACTION OF THE FINGERS (DUPUYTREN'S CONTRACTION) AND ITS SUCCESSFUL TREATMENT BY SUBCUTANEOUS DIVISIONS OF THE PALMAR FASCIA, AND IMMEDIATE EXTENSION. ALSO ON THE OBLITERATION OF DEPRESSED CICATRICES AFTER GLANDULAR ABSCESES, OR EXFOLIATION OF BONE, BY A SUBCUTANEOUS OPERATION. By WILLIAM ADAMS, F.R.C.S., Surgeon to the Great Northern Hospital, etc., etc. With four plates and numerous engravings. Small 8vo, pp. 80. London, J. & A. Churchill, 1879.

Most of our readers will probably recognize in "Dupuytren's contraction" an old enemy who has more than once foiled them. In this excellent and most practical monograph, Mr. Adams shows from anatomical and clinical facts that the trouble does not lie in the flexor tendons, which indeed cannot be involved. It is due to abnormal thickening of the palmar fascia and its digital prolongations, this thickening being the result probably of a gouty tendency.

After detailing the various operative procedures, by open wounds and by subcutaneous section, suggested by different surgeons, the author describes the plan which he has found successful, viz., multiple subcutaneous sections with a very small, pointed, straight-edged knife, followed by immediate extension maintained by padded metal splints.

The other essay, on the Obliteration of Depressed Cicatrices, is briefer, but equally practical.

We consider this little volume, which is handsomely printed and admirably illustrated, an extremely valuable contribution to the literature of surgery. It is well worth careful study.

P.

## GLEANINGS FROM EXCHANGES.

FISSURES OF THE ANUS.—Dr. John C. Peters (*Physician and Pharmacist*, 1879, No. 6) says, "If the fissure is of recent origin it may often be cured without operation, especially if it be situated towards the perineum; but when ulcers have formed, an operation by incision down to their base and deeper is required. Sometimes there is an inflamed filament of a nerve in the ulcer, which may be destroyed by acid nitrate of mercury, or by the knife

cutting down through it and the fibres of the muscles which lie immediately beneath it. The small polypoid growths, if present, must always be snipped off, or the fissure will not heal. If the base of the ulcer be old, gray, and hard, the sphincter will be found hypertrophic and spasmodically contracted, feeling like a strong india-rubber band, with its upper edge sharply and hardly defined; then it must be divided down and through the muscular fibres so as utterly and entirely to prevent all action of the muscle for a greater or less length of time, unless suppositories of the bichloride or ammoniate of mercury, with belladonna or conium, or cannabis indica, can be made to cure it." Phillips says '*belladonna* has a remarkable influence over ulceration-processes of various kinds.' The extract, locally applied, will heal irritable ulcers of the rectum and fissures of the anus, or, if it fail to accomplish this, will greatly mitigate the pain and trouble. In fissure, the purpose may be accomplished in an easy and very satisfactory manner by passing a small belladonna suppository up the rectum night and morning. For the removal of the ulcer, the tincture should also be administered internally. Belladonna is also an excellent agent for the mitigation and complete removal of the acute burning pain which so frequently follows defecation when there is ulceration. It prevents the recurrence of the distressing spasm of the sphincter. If it fails alone to heal the fissure or cure the ulcer, the extract may be combined in equal proportions with mercurial ointment. The latter alone does not exert the same salutary effects, nor is relief obtained so readily as when combined with belladonna. The same holds true even when chronic ulcerations of the rectum arise from secondary syphilis.

"*Tannin* was used by Van Holsbek in solution with sixteen parts of glycerin, introduced into the rectum by tents, night and morning. Suppositories of cacao-butter or stearin containing two or three grains of tannin are still more effectual. *Borax* was used successfully by Brinton, forty grains in four ounces of water with  $\frac{3j}$  of glycerin, as small injections into the bowels, in a case which had baffled all attempts at alleviation for years. *Bismuth* was employed by Trousseau, with three parts of glycerin, as an application to fissures of the anus. Rectal suppositories of bismuth with cacao-butter or stearin are still more useful. It is sedative, astringent, and alterative. The carbonate is more soothing than the sub-nitrate. *Bromide of potash* is recommended by Ringer in five parts of glycerin, in fissures of the rectum, painful growths, and hemorrhoids. *Krameria*, or *rhatany*, is credited with numerous cures, both in adults and children, reported by Trousseau, Bretonneau, and others. They used large injections with  $\frac{3j}$  to  $\frac{3iiss}$  of rhatany, night and morning; then at night only,



and finally, as the cure progressed, every few days. They also advised an ointment of one or two parts to five of lead. Rosse used a solution of one to sixteen as an injection. Its astringency depends upon tannin. Simple suppositories of two to five grains of the extract with stearin or cacao-butter is the simplest and best way of using it. *Sulphate of copper*, two grains in solution, is also recommended. The first applications are painful. *Sulphur*, five to ten grains, with 3j of confection of senna, is recommended by Ringer, not only to maintain the fæces in a soft and yielding state, but to exert a beneficial and specific action on the rectum. If this hold true, suppositories of sulphur with stearin should be still more useful. *Nitric acid*, dilute, internally and locally applied, is credited with many cures. *Iodoform* rectal suppositories are most useful applications; they will so blunt the sensibility of the rectum that passages may take place without the knowledge of the patient. But its odor is very diffusive and disagreeable."

**PRECOCIOUS SYPHILITIC DISEASE OF THE NERVE-CENTRES.**—Dr. Charles Mauriac (*Medical Press and Circular*, August 20, 1879) formulates the result of his experience as follows:

1. Syphilis may attack the nerve-centres at an epoch very near that of the primary accident.

2. Cerebro-spinal syphilitic affections are *precocious* when developed in the virulent period of the disease,—that is, during the two or three first years.

3. There are degrees in the precocity of such cerebro-spinal syphilitic affections: the first comprehends those arising in the first twelve months; the second those which are developed in the second or third year of the constitutional disease. Statistics would seem to prove that those of the first degree are commoner than those of the second; but these results are of but little importance.

4. Among the visceral precocious lesions of syphilis, the cerebro-spinal affections are incomparably the most frequent.

5. They are also the most dangerous. Their gravity is not in proportion directly with the age of the diathesis: those which supervene in the first months of the disease are as formidable as those which belong to the most tardy phases of it.

6. All the forms and degrees and phenomenal combination which make up the symptomatology and process of the effects of syphilis on the neuro-axis are observed as well in precocious cerebro-spinal affections as in the later ones.

7. There are, however, certain symptomatic formulæ which seem predominant. The most frequent are those which consist in an attack of hemiplegia affecting the whole of one side.

8. Among the attacks of hemiplegia, that which is constituted by the combination of

aphasia with right hemiplegia is more prevalent than the rest.

9. The paralytic forms are much more numerous than the convulsive or epileptic in precocious cerebral affections.

10. In these syphilitic cerebro-spinal affections, mental lesions and incoördination of movements are never systematic, as in insanity, general paralysis, or locomotor ataxia.

11. The absence of this systematic order in cerebro-spinal syphilitic affections ought to be regarded as one of their principal characters. Only *one* restriction is to be made in favor of the coexistence of aphasia with right hemiplegia.

12. The precocious determinations of syphilis on the spinal cord are much less frequent than those on the brain.

13. The circumscribed or diffuse suffusions of hyperplasia of the cortical layer of the brain and pia mater, the syphilitic alteration of the Sylvian arteries and consecutive softening, —such are the lesions which appear to belong to precocious syphilitic cerebro-spinal affections.

14. In certain cases of precocious cerebro-spinal affections followed by death, no lesion was found; but at that time syphilis of the arteries was unknown. It is to be supposed that death was caused by a sudden anæmia, which extinguished at once the foci of inner-vascular indispensable to life.

15. We can only make very vague conjectures as to the causation of precocious cerebro-spinal syphilitic affections. In the majority of cases the primary accident has been very benignant, as well as the consecutive cutaneous and mucous manifestations.

16. The general progress of the constitutional disease is not modified by the appearance of precocious syphilitic accidents of the nervous centres. The other manifestations are produced before, during, or after the determination on the neuro-axis, without undergoing from this influence any change in their form or degree, progress or topography.

17. The precocity of the cerebro-spinal syphilitic affections furnishes no peculiar indication as to the question of treatment. Whatever be the age of the constitutional disease, the manifestations on the nerve-centres require the same specific modification. The circumstances proper to the affection itself furnish the indications of secondary importance, relative to the choice, doses, and combinations of the two specific agents.

**ACUTE POISONING BY PHOSPHORUS.**—Dr. Sidney Coupland reports (*Lancet*, vol. ii., 1879, p. 309) the case of a child who had sucked the heads of some phosphorus matches and was attacked a few hours later with vomiting and purging. The next day the child seemed nearly well, enjoyed her supper, and went to bed. During the night, however, she was seized with a fit, and died forty-eight hours after taking the poison. The autopsy showed

no jaundice nor cutaneous petechiæ. Brain and membranes very vascular, but no other gross change. No sub-serous ecchymoses in thorax. Lungs engorged with blood. Right side of heart distended with soft, black clot and fluid blood. Walls of ventricles, especially left, presented on section a yellowish granular appearance, and were extremely soft and friable. The microscope showed an extraordinary degree of fatty degeneration. Mucous membrane of pharynx, œsophagus, and stomach normal. A few small ecchymoses in intestine. Liver-tissue not soft or friable, but showing marked fatty degeneration under microscope. Portions of tissue treated with a mineral acid in a dark room failed to give phosphorescence.

**MALFORMATIONS OF THE SKELETON AND THEIR TREATMENT WITH REGARD TO THE PHYSIOLOGICAL DEVELOPMENT OF THE SKELETON.**—Prof. Hueter, of Greifswald (*B. Med. Jour.*, vol. ii., 1879, p. 460), read a paper on this subject before the recent International Congress of Medical Science in Amsterdam, arriving at conclusions substantially as follows. Acquired pes valgus and genu valgum, when not caused by inflammation or traumatic lesions, are due to diseases peculiar to the development of the skeleton, and connected with abnormal activity of normal physiological changes. The deformity is caused either by normal pressure on abnormally soft parts of the skeleton (rachitic form) or by abnormally great pressure on normal parts of the skeleton (static form). Congenital pes varus is a disease peculiar to the growth of the skeleton. In the majority of cases the onset is not marked by peculiar muscular troubles, the conformation of the bones of the tarsus presenting an abnormal development of the normal fetal conformation. Scoliosis, when not due to the shortening of an extremity, or to a process of cicatrization (chronic empyema), is an affection of the bones of the trunk, caused by asymmetric development of both halves of the pectoral vertebræ, and by asymmetric growth of the ribs, both to the right and left, and the diameter of the thorax. It is a disease of growth analogous to the asymmetric development of the pelvis and skull. Treatment consists in checking by a well-regulated pressure the tendency of those portions of the bones which grow exuberantly, and in stimulating, by removing all pressure, the growth of those portions of the skeleton which are backward in their growth. By applying this method to the treatment of cases of incipient scoliosis, we may be sure of success.

**TREATMENT OF PROLAPSUS ANI.**—Dr. Vidal recommends injection of a solution of ergotin for this purpose. The *Paris Medical* mentions three cases in which this method was employed. In one of these the prolapse, which had existed for eight years, yielded to the treatment in three months. In two other

instances the cure was much more rapid. At the present time there is a woman under observation at St.-Louis, who has been almost entirely cured by three injections. The contractions produced by the introduction of ergotin extend, as a rule, to the bladder, and give rise to spasm and dysuria.—*Lancet*.

**URETHRAL DILATATION.**—Dr. Southworth (*New York Med. Record*, 1879, p. 386), recognizing the impropriety of enlarging the meatus when it is within eight millimetres of the calibre of the spongy portion of the canal, and hence the impossibility of sufficiently dilating strictures situated within the first inch of the urethra with any of the dilating instruments now in use, has resorted to the expedient of introducing ovoidal wedges of different sizes. These are made of lead, flattened and grooved on one side, and are put in position previous to the insertion of the conical steel sound, which latter is made to glide along the grooved surface of the wedge, thus stretching to any desired extent the ruptured or incised tissues. A small wire should be attached to these wedges for convenience of introduction and removal.

**GINGIVITIS OF PUERPERAL WOMEN** usually appears after the fourth month of pregnancy, and tends to disappear naturally a month or two after parturition. The local treatment suggested by Pinard is touching the diseased parts with tincture of iodine, glycerolate of tannin, chlorate of potash, chromic acid, etc. The most efficacious local treatment, however, which always succeeds, is equal parts of tincture of cochlearia and solution of chlorate applied daily with lint.—G. R. C., in *New York Medical Journal*, 1879, p. 429.

**TOXIC SYMPTOMS FROM THE USE OF DUBOISIN DROPS.**—Mr. Nettleship reports (*Lancet*, vol. ii., 1879, p. 352) several cases in which one to four drops of duboisin solution, applied to the eye as a mydriatic, produced toxic symptoms.

In one case a man began to feel drowsy half an hour after the instillation of the remedy, staggered, and said he felt giddy; he lost power over his limbs, and finally became delirious and violent. The next day he felt better, but weak, and he complained of numbness in the fingers for some weeks. The solution used contained four grains of crystallized sulphate of duboisin to the ounce of water, and was therefore of the strength of  $\frac{1}{16}$  gr. to the drop.

**TOXIC EFFECTS OF TEA.**—A horse belonging to Lord Beresford, in the late campaign against the Zulus, was allowed, through some inadvertence, to eat several pounds of tea at a meal, which produced the most startling results. The animal plunged and kicked, and ran backwards, at intervals galloping madly around, finally falling into a donga, where it lay dashing its head on the rocks, and was dispatched by an assegai thrust through the heart. The post-mortem appearances indi-

cated extreme cerebral congestion. The occurrence as an accident is probably unique. The phenomena exhibited were, however, characteristic of the action of caffeine, namely, cerebral excitement, with partial loss of sensibility, convulsions, and death. The sensory nerves are paralyzed without any corresponding paralysis of the motor nerves, so that the muscular action which proceeds from ideation and volition remains unaffected. The reversal of limb movements, which produce running backwards in quadrupeds, is a common symptom of brain disturbance, frequently witnessed, for example, in the case of puppies with unclosed crania. The case is one of great interest, and may help to throw light on the action of tea, which has not been sufficiently studied, and must be still classed as unexplained.—*Lancet*, vol. ii., 1879, p. 362.

**MERCURIAL STOMATITIS FROM THE LOCAL USE OF BLACK WASH.**—Dr. George P. Best gives the following case (*Lancet*, vol. ii., 1879, p. 463): A man of 26 came under his care, suffering with five excavated ulcers surrounding more or less the left leg. They were elliptical in shape, of various sizes, the largest having the respective diameters of six and three inches, the smallest an inch and a half and one inch. Their appearance immediately suggested syphilis. The right leg was without spot. He put the patient on ten-grain doses of iodide of potassium, and black wash to be applied to the sores. In three days' time the ulcers showed signs of improvement, but the patient complained of pain at the angles of the lower jaw, difficulty in opening the mouth, and looked somewhat swollen in the face about the region of the submaxillary glands. In order to ascertain if these symptoms were due to the mercurial, the black wash was stopped, and the symptoms disappeared, only to reappear once more when the application was once more employed. This experience seems to point to a possible method of treatment in these cases without the use of internal remedies.

**POISONING BY BICHROMATE OF POTASSIUM.**—Dr. A. Dunbar Walker (*Lancet*, vol. ii., 1879, p. 464) was called to see a man who had taken by mistake a drachm of the bichromate of potassium dissolved in half a tumbler of water. Five minutes later he had been seized with violent vomiting and purging. When seen by the doctor, two hours afterwards, he was pale and anxious, pulse feeble and irregular, surface of body cold and clammy, cramps in stomach. A little tincture of opium given allayed the pain and quieted the stomach. Hot applications were made to the feet, and after a few hours reaction set in, and he became feverish, with a pulse of 120. Next day he was better, but passed seven evacuations of a pea-green color. In a day or two he was convalescent.

**MANAGEMENT OF PATIENTS WITH PROSTATIC ENLARGEMENT.**—Dr. Reginald Harrison

speaks as follows on this subject (*Lancet*, vol. ii., 1879, p. 463): Patients long before reaching the confines of threescore years and ten, some by anticipation, others by a realization, of the earlier symptoms of prostatic enlargement, not unfrequently ask advice as to how they may keep in abeyance the graver symptoms and complications of this affection. In advising such persons, I have for some years been in the habit of laying stress upon the following points:

1st. To avoid being placed in circumstances where the bladder cannot be emptied at will.

2d. To avoid checking perspiration by exposure to cold, and thus throwing additional work on the kidneys. In climates such as our own, elderly persons should, both in summer and winter, wear flannel next to the skin.

3d. To be sparing of wines or spirits exercising a marked diuretic effect, either by their quantity or their quality. Select those which promote digestion without palpably affecting the urinary organs. A glass of hot gin-and-water, or a potent dose of sweet spirit of nitre, will not do anything to remove the residual urine behind an enlarged prostate.

4th. To be tolerably constant in the quantity of fluids daily consumed. As we grow older our urinary organs become less capable of adapting themselves to extreme variations in excretion. Therefore it is desirable to keep to that average daily consumption of fluids which experience shows to be sufficient and necessary. How often has some festive occasion, where the average quantity of fluid daily consumed has been largely exceeded, led to the over-distention of a bladder long hovering between competency and incompetency! The retention thus occasioned, by suspending the power of the bladder, has often been the first direct step in establishing a permanent, if not a fatal, condition of atony or paralysis of this organ.

5th. It is important that from time to time the reaction of the urine should be noted. When it becomes permanently alkaline in reaction, or is offensive to the smell, both necessity and comfort indicate the regular use of the catheter. If practicable, the patient may be instructed in the use of the instrument.

6th. Some regularity as to the time of performing micturition should be inculcated. We recognize the importance of this in securing a regular and healthy action of the bowels, and though the conditions are not precisely analogous, yet a corresponding advantage will be derived from carrying out the same principle in regard to micturition.

The sum of these instructions is, that inasmuch as we cannot arrest the degenerative changes by which the prostate becomes an obstacle to micturition, it becomes of the first importance that every means should be taken to compensate for this by promoting the muscularity of the bladder and preventing it be-

coming atrophied or paralyzed either by accident or improper usage.

### MISCELLANY.

**SEWAGE.**—Dr. W. Allen Sturge, of London, has recently read a paper at the meeting of the Institution of Surveyors, in which he compares the methods of sewerage in France and England, and describes the sewage irrigation near Paris. Of the nine hundred and fourteen acres now fertilized with the sewage of that city, nearly seven hundred are devoted to market-gardening, the produce being readily sold, even at the largest hotel. The amount of land under treatment has increased each year since the beginning of the experiment, twelve years ago, and in spite of complaints of bad odors, there can be no reasonable doubt that Paris will before long follow the example of Berlin, and deal with all the sewage of the city in this manner, the alleged saturation of the soil and injury to health having been shown to be unsupported by facts. As in Berlin, the expense of irrigation is much greater than the returns from it. In Paris the sewage is taken or refused at pleasure by small tenants or land-owners. In Berlin the city has bought the land, and controls the whole matter. It is an interesting fact that the Essex Reclamation Company of London still hope to carry out their project of reclaiming the sands on the north side of the mouth of the Thames, and to dispose of the one hundred and twenty million gallons of sewage daily from that city by irrigation.—*Boston Med. and Surg. Journal.*

**PARACENTESIS POST-MORTEM.**—A correspondent of the *British Medical Journal* says he was called to see a man in the last stage of dropsy, and advised tapping. The advice was not taken, and the man began to sink. One morning the doctor was knocked up at five o'clock. "We want you to go and tap yon man directly," said a voice under the window. "What, at this hour of the day?" "Yes; he's dead," was the reply. "He's so big"—The doctor did not tap him.

A MOST extraordinary tale is in the public press concerning the death of the nephew of Prescott, the historian, which lately took place at Brooklyn. He was subject to a severe neuralgia, supposed to arise from a decayed tooth. This was filled by a dentist in Boston, and soon afterwards the decay in the tooth spread to his jaw and other tissues, and only stopped when, as the papers state, it had "severed the connections between the head and body save the spinal column," at which point the patient succumbed. The dentist was blamed with the death, he having, as it was said, filled the tooth with arsenic to destroy the nerve. This he denied, however; and even if he had not, such ravages from arsenic as those related in this case would be

rather fresh news to the profession.—*Louisville Med. News.*

It is announced that Prof. E. S. Gaillard has resigned his chair in the Louisville Medical College.

**THE VETERAN LECTURER OF THE WORLD.**—It is stated that Prof. Chevreul, well known for his researches on fatty acids and fats, has commenced his annual course on organic chemistry, in Paris, although in his ninety-third year.

WE have been requested to announce that the National Board of Health request that all sanitarians who are interested in the permanent organization of the Board or in the question of quarantine shall meet them for conference in the city of Nashville, Tennessee, on the 18th to the 23d of November, at which time the Public Health Association will be in session in the city designated. We most sincerely hope that this request will meet with an earnest response. Those who can should go as delegates to the American Public Health Association.

The railroads in Tennessee, as usual where the public health is concerned, have agreed to do all in their power. Passes will be sent to delegates from other States both ways over the main lines in Tennessee, upon early application by letter to Dr. I. B. Lindsley, No. 78 N. Cherry Street, Nashville, Tennessee.

The hotels of Nashville also offer reduced rates to delegates, and the lines of the Western Telegraph Company are at the service of members for necessary domestic purposes.

### NOTES AND QUERIES.

#### A NEW REMEDY FOR HAY FEVER.

TO THE EDITOR OF THE MEDICAL TIMES:

DEAR DOCTOR,—Apropos of your recent editorial notice of the veil in hay fever, allow me to recommend a new remedy I tried, more as an experiment, in a patient of mine two years ago this summer, but which proved a success. This gentleman had been for years a victim to that disease. Two years ago he tried my remedy for the first time, and since then he has been perfectly free of that dreadful disease during the last two summers. This consisted in placing two well-cleaned pieces of fine sponge of a proper size to be well fitted in each side of the nasal passages, and to be kept moistened all the time with pure water. For this purpose my patient always carried a small bottle full of water in his pocket. The sponge is to be worn day and night, and until the season and susceptibility for taking the disease are over. The sponge also must be washed and cleaned, or, better still, be replaced by new pieces every day, these having been prepared beforehand and introduced into the nostrils immediately the others are removed. The patient, of course, must get used to breathe through his mouth, as the sponge will prevent him from breathing through his nose.

You will see, Mr. Editor, my remedy is a simple but efficient one, and I have no doubt you will agree with me when I state that those that will try it will prefer it, for many reasons, to wearing a veil.

I need not explain the *modus operandi* of this simple little contrivance, as any one can see at a glance its object, which is to strain the air, and thus prevent the poison from getting into the nasal cavities, etc.; this is done thoroughly and effectually by the sponge respirators.

In conclusion, I will ask my brother practitioners to try and recommend to their patients afflicted with that disease the above remedy, which I found so useful and effectual in the case already cited, and to report the result of their experience and success through the medical journals.

JULIO J. LAMADRID.

BROOKLYN, October 27, 1879.